The Month

BRITISH MEDICAL ASSOCIATION.

THE thirty-fifth Annual Meeting of the British Medical Association, held this year at Dublin, under the presidency of Dr. Stokes, commenced on Tuesday, the 6th inst. The members of the Association were received by the medical practitioners of Dublin with true Irish hospitality, and the meeting has caused much excitement in extra-professional circles. Papers were contributed by many of the most eminent physicians and surgeons of England, Scotland, and Ireland, and some important suggestions for medical reform were discussed by the members. Though a full report of the proceedings would be out of place in a journal which merely represents "the handmaid of medicine," we propose to place before readers a few noteworthy extracts from the addresses delivered. The following passage from the Inaugural Address of the President will be read with pleasure by all who desire to see the scientific foundation of medicine strengthened and extended:—

LAWS OF EPIDEMICS—INVESTIGATIONS IN THERAPEUTICS.

Of the objects of good which are attainable by ourselves, I may specify two among many: the determination of the laws of epidemics, and the placing our knowledge of therapeutics on something of a scientific basis. It was held by Humboldt, as we read in his "Cosmos," that the question of epidemics is one of the most obscure and difficult of inquiries. And here I may recall to your minds the proposition of Graves, that the different governments of the combined world should unite in the establishment of medical observatories in their respective dominions in the various latitudes of the earth, where a careful record of every meteorological and terrestrial phenomenon should be kept, with all the accuracy of the latest science in connection with observations of the rise and progress of every epidemic. Thus a combined series of observations would, after a time, lead to knowledge, negative or positive, as the case might be, which would be invaluable.

The second desideratum is to settle the therapeutic science which, at present, is in a large measure traditional empiricism. Not the less valuable and trustworthy on this account; for in all traditions there is an element of truth. What is wanting, is to have applied to therapeutics the same method of investigation which is used in other scientific inquiries. This all-important question has been raised in the Medical Council, which is charged with the care of our national Pharmacopœia, and it was proposed by Dr. Acland that a portion of the funds should be used to defray the expenses of scientific investigations as to the value of medicines. The framers of the Pharmacopœia can reject or admit this or that supposed remedy; and, until the values of these medicines are established by severe investigation, we shall go on in the old way. I refer you to the discussions in the last two sessions of the Council. Dr. Acland's motion was lost, but it had the support of a strong minority. It is hoped that he will persevere. A similar course was taken by Professor Bennett at your last meeting; and a small grant of money was made to him to initiate observations on the value of a single remedy.

But such investigations are always attended with great difficulty; and to determine the value of any one medicine, or any special line of treatment, in any given case or set of cases, is a very complex problem. When we consider the influence of the epidemic constitution, as indicated by Sydenham, even in the so-called local diseases, it seems probable that, even if we succeeded in determining the value of this or that remedy, the expression of that value would be only good for the time during which the epidemic constitution isted. Again, the question of change of type of all diseases, local and general, sporadic or epidemic, becomes of great mportance in settling the value of any particular mode of treatment; and all these considerations bear on the object and purpose of the researches in question. Nor is it to be orgotten that, although we may arrive at a numerical expression of the value of a remedy under certain circumstances, yet what the physician or surgeon wants to know is, not so much the treatment that will save the greatest number out of a given number, but what is best to be done in the cases of A, B, or C. The tendency to base our treatment of medical and surgical disease upon averages should be resisted, as not seldom leading to a mischievous routinism, the more dangerous as it assumes the garb of a scientific result.

But these difficulties should only stimulate us to accurate research in therapeutics, for the result can only be for good. I feel that the views of this meeting, as well as those of men of science in general, will go with Dr. Acland in the opinion that, as the Medical Council is charged with the care of the Pharmacopœia, it should carefully consider the mode by which this national work has been created and has to be renewed; and that, at all events, no additional drug or agent should be added to it, under the too prevalent system, until a severe scientific inquiry, made by unprejudiced and impartial observers, had been instituted as to its amount of value.

HOW FOREIGN MEDICAL DEGREES ARE OBTAINED.

From the Address in Medicine, delivered by Sir Dominic Corrigan, we obtain much information respecting the sale of American and German degrees. Sir Dominic Corrigan says:—In the amended Bill that has been put forward by the Medical Council there is one clause that I make no apology for bringing under earnest attention. It is that the General Medical Council shall have a power to admit *without examination* to the registry, and thus make them eligible for all appointments in the United Kingdom, the holders of foreign diplomas equally with our own graduates and licentiates, on satisfactory evidence being laid before it that those degrees or licences have been granted after a sufficient course of study and examination. The proposed clause will be found in the minutes of the General Medical Council of June 5 of this year. I hope the whole profession will seriously consider this proposed clause, and will unite with me in resisting it, not merely for their own sakes, but for the public good. It is notorious that in both Germany and in America there are universities that sell their diplomas just as they sell beer or Indian corn to all who can afford to pay for them. Most of my hearers have probably seen the manifesto of the University of Erlangen, in which they stigmatise the statement I made to this effect in the Council as "void of foundation in all its particulars," and my reply, both published in the Journal of this Association of July 20th. In that reply I adduced instances of four German universities, in which I showed proof, by documentary evidence, that they conferred degrees *in absentiâ*; and that so low are their degrees held in their own country, that their diplomas did not enable the holders to practise there. I have received other evidence since. A gentleman connected with the medical and literary press of London has placed a document in my hands, in which he certifies that an American agent called on him this present year with diplomas duly signed and sealed by one of the American colleges nine or ten years old; that he could have a supply fifteen years old if required; and that he had a variety in stock, price £20, and would allow a discount off, as it was a matter of business. This gentleman is quite ready at any time to verify this memorandum, and to give his name.

I have within the last week received letters from two members of the profession, one of them a president of one of our Branch Associations, in which he encloses to me a communication from an agent in Glasgow, in reply to a communication for the purchase of a foreign diploma, and I am sorry to say he is an M.D. of one of our Universities. The letter is so characteristic, that I shall make no apology for reading it at length:—

"Ewing-place, Glasgow, 24th July, 1867.

"MY DEAR SIR,—After having had the pleasure of your note of the 6th inst., I write you in direct course. I stated in terms of my said letter that no University but that of the state of Pennsylvania gave degrees of Medical Doctor *in absentiâ*, the cost being £32 12s., and in full of all demands and delivered free. I also stated in terms of my said note that the University of Gissen, of Hesse Darmstadt, gave degrees of M.D. for £22 paid there, and £15 10s. sterling paid here, and also in full of all demands. In either case I will cheerfully assist you or your friend in obtaining the object in view. As I have four new degrees to get at Pennsylvania next week, and other four at Gissen also, please send me £32 12s. for the Pennsylvania degree, or £15 10s. in part of the Gissen degree, and I will send all the requisites to you in course.

"I am, my dear Sir, very truly yours, M.D."

To give this epistle due dignity, there is inserted on the envelope, "On Her Majesty's Service." It is scarcely necessary to observe that I have in my possession the documents and the names. It is further to be observed with regard to some of the German universities that the same university gives two kinds of degrees—one on a *viva voce* examination, the other *in absentiâ*. This is abuse enough, but there is another ingenious subdivision of the *viva voce* examination. To any one of honest intelligence the phrase *viva voce* examination would convey that the candidate presented himself at the seat of the university, and was examined there by its authorities. Not at all; for in one of the documents in my hands the applicant, residing within this kingdom, was referred for the *viva voce* examination—to whom do you suppose?—to one of their own graduates in the neighbourhood of the applicant; and the applicant was informed that on passing such *viva voce* examination and payment of £32 he was to have the degree.

DR. HENRY BENNETT ON THE TREATMENT OF PULMONARY CONSUMPTION.

The author commenced by stating that his motive in writing the paper was not so much to bring forward doctrines new to the profession as to bring the subject of the treatment of consumption before the Association for discussion. He should purposely omit all allusion to the origin and nature of tubercle, and confine himself, as far as possible, to the consideration of treatment. Whatever the views entertained respecting the intimate nature of tubercle, it was generally admitted that its deposit in any part of the body was the result of defective nutrition, itself the result of a lowered state of vitality, hereditary or acquired; its presence was a sign of vital decay and the forerunner of eventual death, a mere mode of dying. In a philosophic sense, tuberculosis was not an inexplicable scourge of the human race, but one of the means resorted to by Providence to weed it of effete, worn-out organizations, incapable of perpetuating it in its integrity. Were the sickly, the aged members of the community to have the power of continuing their race, it would soon become one of pigmies, of misshapen abortions. Thus, those who marry too young or too old, diseased, worn out, have children who die of tubercular meningitis, of scrofula, of pulmonary consumption; whilst even those who have healthy youthful parents, and who are born with the seed of life in them, may wear out their organic powers in the struggle of life, and succumb to accidental phthisis. Mr. Darwin has shown by his luminous researches that the struggle for life pervades animated nature. In the undomesticated animal kingdom the sickly and the aged die from want of power to secure their existence, or are exterminated by their natural enemies, so that the young and vigorous alone survive to perpetuate their race. With man it is different: his intellect enables him to lay by for the future, to preserve his own existence in old age, and to provide for his sickly progeny. Thus society is full of effete organizations, unfit to continue the species in its integrity. But the laws of Providence corrects our errors, and the race is weeded through the sad influences of disease and death. If these views are correct, the treatment of phthisis must be essentially sthenic. Our remedies must be directed to invigorating an originally defective organization, or to renovating the constitutional powers of the accidentally debilitated. If we can do this the progress of the lung disease will stop of itself, and the lung mischief becomes a mere sore or wound which nature can and will limit, and even heal. In this view of pulmonary tuberculosis the inflammatory affections which accompany its evolution become epiphenomena. Although they have their importance, and may be the eventual cause of death, it is with the tubercular diathesis principally, with the lowered organic power, that we have to deal. Such being the case, it is mainly by appealing to the laws of healthy life, of physiological hygiene, that we are likely to succeed in renovating exhausted organic vitality and in prolonging life. Medicines are of great use, no doubt, in restoring damaged functional action, in helping, assisting our hygienic efforts, but alone they cannot renovate an organization early exhausted and drawing gradually through tubercular disease to its natural close. They cannot renew an organization worn out by the social infringement of hygienic laws. Thus if a shrub planted in a city square were dying from bad air, smoke, defective drainage, and bad soil, the horticulturist, anxious to save it and restore it to health, would not merely add a little bone dust, guano, or manure to the soil, and wait the result. He knows that the unfavourable influences to which the plant is still exposed are too powerfully antagonistic, and that his plant would die. He therefore transplants it to the country, in pure air, in good soil, exposed to genial sunshine; and, under influences favourable to plant life, he finds a gradual, perhaps a permanent, recovery takes place. Under these more favourable circumstances he may also often find his manure really beneficial. Such should be our conduct. We must remove consumptive sufferers from all unfavourable influences, and apply in their behalf all the laws of hygiene, which are too well known to the profession to require enumeration. Some points, however, respecting which there may be difference of opinion, require notice. Ventilation should be free; air should pass in and out of the room in which consumptive patients live, night and day; and they should keep all day, if possible, in the open air. Free ventilation is not only most advantageous to the invalid, but also diminishes the danger of the consumptive patient's attendant getting the disease, if such a danger exists. The late researches on the inoculation of tubercle appear to show that this danger, which is a conviction with the inhabitants of Southern Europe, really does exist. The author had certainly met with several cases that appeared to substantiate it. The action of the skin should also be encouraged by cold or tepid sponging and friction. Such sponging, with proper care, is altogether without risk, whatever the state of the patient, the stage of the disease, and the complications that exist. Active exercise should be very limited, as debility is at the root of the evil; passive exercise should, however, be resorted to. To carry out fully this hygienic treatment, both rich and poor should be located, as far as possible, in the country. Consumption hospitals should be established also in the country. Those who have the means increase their chance of recovery by migrating in the winter to a warmer winter climate. Formerly, when consumption was considered akin to inflammation, warm moist climates were recommended, such as the tropics and Madeira. Now we are aware that such climates relax and debilitate, and are not generally suited to a disease of debility. To send consumptive patients to such climates is to treat the epiphenomena of the disease, and not the disease itself. Dry, cool, bracing, sunny climates, such as that of the north shore of the Mediterranean, are more appropriate to them. By the combined influence of these agencies the author had saved his life and that of many others. Eight years ago he abandoned practice, and went to the Genoese Riviera (as he and others thought) to die in a hopeless state of advanced phthisis; but thanks to hygiene, climate, and medicine, he had regained a tolerable share of health, as had many others whom he had observed. He had thus learned to place much more confidence in the power the physician has in thus arresting the progress of this dire disease than his previous Paris and London experience had given him.

LAW.

"UNITED SERVICE SOAP."—FIELD *v.* LEWIS.

In the Vice-Chancellor's Court, on the 3rd inst. The plaintiffs in this case, Messrs. Field, of Upper Marsh, Lambeth, sought to restrain, by injunction, the use of the words "United Service" in connection with soap, on the ground of their exclusive right by appropriation to this title or description. The defendant is a soapmaker, of Bartlett's-buildings, Holborn, and has recently commenced selling "United Service" soap.

Mr. Kay, Q.C., on behalf of the defendant, submitted hat no case whatever was shown for an injunction, as the efendant had distinguished his soap by adding his own ame to the label. The plaintiffs had not shown that they ad any exclusive right to this title, "United Service," as pplied to soap, and there was no sort of evidence that any ne had been deceived into the belief of buying soap from ne defendant that he was obtaining soap of plaintiffs' anufacture. The bill, moreover, had been filed without ny previous intimation or warning to the defendant.

A reply was not heard.

The Vice-Chancellor said that the case was clear for an terim injunction. The plaintiffs had sufficiently estalished themselves, by a ten years' user, as the sole makers f "United Service Soap." Any one asking for that deription of soap would mean soap made by the plaintiffs, nd the name could only have been adopted by the defendnt, who gave no explanation on the subject, for the purpose f deceiving the public. There must be an injunction until e hearing of further order.

Upon the subsequent consent of Mr. Kay, an order was ade for a perpetual injunction, with costs.

GOSSIP.

HE Sewage Utilization Act of 1867, for facilitating the stribution of town sewage for agricultural purposes, has st been printed, as passed by the House of Commons. ocal Boards may provide any works for receiving, storing, sinfecting, or distributing sewage within their respective stricts, and in districts where no local Boards exist a special thority may be created for the purpose. Such Boards or thorities may purchase any requisite lands, and for agriltural objects may lease land for a period not exceeding ven years, or may contract to share the produce or farm and dispose of the produce. Different districts may unite these ends. Authorities under the Act may also agree contribute to any outlay on the part of private capitalists public companies for carrying sewage plans into execution, d, as regards companies, may become shareholders. All sessments under the Act are to be included in the pooraes.

With reference to a recent discussion regarding the practibility of obtaining meat from Australia, the secretary of e Australian Meat Company, of which Messrs. John M'Call d Co. are the wholesale agents, states that they have en steadily at work on the subject for the past year, that eir sales are gradually increasing, and now amount to out 30,000 lb. per month, and that at the present time y are killing on their establishment at Ramornie, Clarence ver, New South Wales, about 15 bullocks per day. The t half of each carcass is, it is said, sent to London as led beef, and the other half is made into Liebig's extract meat.

The British Medical Association began its meetings in blin on the 6th inst., when the new President, Dr. Stokes, ivered an address, in which the transactions of the ociation for more than a quarter of a century were rewed. In the practice of medicine, as it exists in these ntries, Dr. Stokes said, "Two methods exist—one, in ch the trade element is very prominent; the other, the fessional. The gradual elimination of the first, and the sequent advance of the second, were the great objects all who sought to raise the status of their calling in a al and scientific point of view." Among the special ects of good he would specify to them as worthy of being ined were, the determination of the laws of epidemics, the placing of our knowledge of therapeutics on someg of a scientific basis. He would call to their mind the position of Graves, that the different governments of the ld should unite in the establishment of medical observaes in their respective dominions in the various latitudes he earth, where a careful record of every meteorological terrestrial phenomenon should be kept with all the racy of the latest science, in connection with observas of the rise and progress of every epidemic. "The nd desideratum was to settle the therapeutic science. as long the wish of Sir Charles Hastings that the body ld visit Ireland, and he bade them welcome to the halls Jsher and Berkeley, of Swift and Burke and Goldsmith, of Curran and Grattan, of Hamilton, M'Cullagh, Lloydd Hearne, and Graves." The history of Ireland was a singular one. More than a thousand years ago, she was the centre of the Christian civilization of Western Europe. Exhausted by fruitless contests with England, she was at last unites with her. "The two countries," continued Dr. Stoke,, are now beginning to know one another better, and to excuse, or explain, or forget what was wrong on either side, and to know and estimate that which is right." With the advance of education, old prejudices and memories of wrong would fade away. "That visit (of the Association) would hasten the time when the crown of our loved sovereign will surround and embrace in its golden circle a united and a happy people. It had a national, as well as a scientific importance, which recommended it to all loyal and right-thinking men." The attendance at the meeting is large, and includes physicians and surgeons of eminence from London, Edinburgh, and almost all the large towns of England and Scotland.

At Penrith, on the 5th inst., a retired physician, Dr. Allinson, shot himself in his library, and was found lying dead on the floor. Another physician, Dr. Jackson, residing in the same town, when informed of the occurrence, threw up his arms in astonishment, fell back, and expired in the arms of a visitor. Both deaths occurred in the same day.

The authorities of University College have decided to increase the number of beds at the hospital by erecting a fourth story, in which the nurses may be accommodated, thus leaving an extra wing for patients.

A correspondent writing from Malta on the 23rd ult., states that no further cases of choleraic disease had occurred there, and that the health of the troops was most satisfactory.

The secretary to the Australian Meat Company (Limited) wrote to the *Times* on the 7th inst. to say that only the best portions of the bullocks killed by that company are imported into this country as preserved beef, the inferior parts being made into Liebig's extract of meat. A gentleman of the name of Rotter, who describes himself as secretary to Liebig's Extract of Meat Company (Limited), replied on the 9th inst. that the fact is not so, and that Liebig's extract of meat also claims to be made only of the choicest parts of the Australian bullock. This correspondence called forth the following communication from the pharmaceutists of Plough-court:—"Plough-court, Lombard-street, Aug. 10. Sir,—Referring to a letter from Mr. Charles Rotter in the *Times*' City Article of yesterday, we beg to say that the paragraph to which he alludes (the *Times*, 7th inst.) does not apply to the Liebig's extract of meat manufactured on the establishments of Robert Tooth, Esq., of Sydney, of which we are consignees. It appears that the inferior portions only of each ox are used by the Australian Meat Company for making Liebig's extract, the better portions being preserved entire. This is not the case on Mr. Tooth's establishments, which have been arranged for the production of extract only. Each package of Mr. Tooth's Liebig's extract delivered to the public bears the certificate of examination of Dr. W. A. Miller, of King's College.—We are, sir, your obedient servants, Allen and Hanburys."

On the 12th inst., at a petty session of the justices held at the Court-house of the Tower Hamlets, in Great Prescott-street, fifty-eight tradesmen and others were convicted and fined as under, for the use of false scales, weights, and measures. The list embraced eight licensed victuallers, two beer retailers, twelve chandlers, seven butchers, four coal dealers, seven greengrocers, ten tobacconists, one baker, one pork butcher, one corn and flour dealer, one cheesemonger, two grocers, one oilman, and one person keeping a stall in the street for the sale of fish. The total of the fines was £88 15s. Three of the parties not paying the amounts of amercement up to the rising of the Court, were sent to the House of Detention at Coldbath-fields, two of them being for two months' imprisonment.

A coroner's jury has condemned the atmosphere of the underground railway. They do not go the length of a verdict of manslaughter, but they say that the atmosphere accelerated the death of a woman named Dobner, who resided at Eton. The deceased travelled from King's Cross to Bishop's-road, and on reaching the latter station, before she could cross over to the Great Western departure platform to take the train for Windsor, in order to reach her home, she was taken very ill and died suddenly. Mr.

Anderson, one of the surgeons at St. Mary's Hospital, who made the post-mortem examination, said the deceased was labouring under disease of the bronchial gland, and undoubtedly the suffocating air of the underground railway had accelerated death. The coroner (Dr. Lankester) said he had experienced the depressing effect of that railway, and therefore avoided it as much as possible. The tunnels and stations should be ventilated, but he supposed that would not be done until some shocking loss of life from suffocation had occurred.

A slight improvement is reported as having taken place in the health of the Empress Charlotte, who expressed herself pleased at being once more at home. The foreign journals freely circulate the report, to which credence is given by the "people," that the illness of the Empress is to be ascribed to the fact of her having been poisoned by her maid.

A deputation consisting of Mr. Sandford (President of the Pharmaceutical Society), Mr. Morson, Mr. Hora, and Mr. Darby (London), Mr. Evans (Liverpool), and Mr. Brady (Newcastle), had an interview with the Duke of Richmond and the Right Hon. Stephen Cave, at the office of the Board of Trade, this week, on the subject of the Merchant Shipping Bill.

Dr. Burnstall, passenger from Galle by the last mail steamer, was incautiously playing with a pet cobra di capella on the 23rd. The snake bit his finger, and he died immediately after.

Mr. Joseph Ince has been elected Fellow of the Royal Botanic Society.

In the *Lancet* of last Saturday, Mr. A. Campbell, of Navenby, Lincolnshire, publishes the facts of a severe case of traumatic tetanus successfully treated with the Calabar bean. The patient, a girl of twelve years, had cut her thumb in chopping meat, and three months after her jaws had become firmly locked, and her body and limbs perfectly rigid. Mr. Campbell commenced using the Calabar bean on the 17th of March last, in the form of extract dissolved in white wine, and on the 20th of April the girl was quite cured, as far as the tetanus was concerned.

An important volume, entitled, "Comparisons of the Standards of Length of England, France, Belgium, Prussia, Russia, India, Australia, made at the Ordnance Survey Office, Southampton," has been produced by Capt. A. R. Clarke, under the direction of Col. Sir Henry James. The publishers are Eyre and Spottiswoode.

By advertisement in the daily journals, "a gentleman who has lately recovered from a serious illness" has declared his readiness to pay the munificent reward of £2,000 to any person who, between the present time and the 1st of July, 1868, shall discover a mode of *permanently* and completely extinguishing pain in all, or nearly all cases; the said means being "effectual, harmless, cheap, and easy to apply." Should no such discovery be made, £1,000 will be given as awards to such persons as shall have made "discoveries of minor importance, but yet of great service in the relief of pain."

Dr. E. Symes Thompson has been elected Professor of Medicine in the Gresham College. According to the *Lancet*, the new Professor intends to make his lectures on physic, which will commence in Michaelmas term, of some use, by dealing with questions of sanitary science and hygiene in a semi-popular style.

The office of Curator of the Museums of the Pharmaceutical Society of Great Britain is vacant, and the Council of the Society are prepared to receive applications from gentlemen desirous of filling it. A practical knowledge of chemistry, materia medica, and botany, is indispensable. Salary, £100 per annum. Applications, with testimonials, must be sent in on or before August 12. Full particulars of the duties may be obtained from the Secretary, Mr. Bremridge, 17, Bloomsbury-square.

The honour of knighthood has been conferred upon the surgeon who rendered such admirable service to the late King of the Belgians. Sir Henry Thompson was successful where MM. Civiale and Langenbeck had failed.

GAZETTE.

BANKRUPTS.

Allen, James, Leighton-road, Kentish-town and Aldershot, veterin surgeon.
Bayly, Joseph Henry, Great Yarmouth, chemist.
Brown, William Spence, Strood, Kent, surgeon.
Collins, J. Fulwood, Lancashire, doctor of medicine.
Cox, Stephen, Bootle, chemical manufacturer.
Edwards, R., late of Leominster, chemist's assistant.
Goodsir, T. H., Kilham, Yorkshire, surgeon.
Gryham, Gerson, Cardiff, mechanical dentist.
Ingram, John, late of S·tley, near Birmingham, soap manufacturer.
Reeve, Joseph, Bridgwater, veterinary surgeon.
Roue, Francis Fairchild, Bristol, druggist's assistant.
Willis, Edward Charles, Pinxton, Derbyshire, surgeon.
Worlidge, Margaret, Blackley and Manchester, French perfumer

PARTNERSHIPS DISSOLVED,

Bowden and Co., Barton-upon-Irwell, chemists.
Corfield and Perry, Birmingham, and Acock's-green, homoeopath chemists.
E. T. and F. S. Fowle, Nottingham, chemists.
Gallard, J. K., and Morland, H., Great Northern Soap Works, Yor road, King's-cross, and India Chambers, Leadenhall street, manuf turers of export soaps.
Pugh, P., and Armson, J. C., St. Helen's, Lancashire, manufactu chemists.
Riding and Drew, Euston-square and Tavistock-square, surgeons.
Russell and Storrs, Doncaster and elsewhere, surgeons.
Spencer, W. E., and M'Rae, J. H., Cumberland Mills, Plough-ya Shoreditch, drug grinders.

PROFESSIONAL IMMORALITIES.*

Those who are fond of praising the good old times are nc perhaps, altogether wrong, either in point of philosophy ethics; for there can be no doubt that, in many respect we are worse, and not better off than our fathers. In department of practice does our statement hold more tr than in that of the professions. The evil, moreover, is n much mitigated by the fact that in each of them licens may or must be obtained previously to commencing acti service. Take the case of medicine and surgery, for instan A number of rival corporations offer their certificates to candidate. Each certificate is not only "cheap," b "highly recommended;" even one of the very lowest cla from the greater length of title it confers, may be "good f mixing." Now, a man who is insuperably dull, or wilful ignorant, or lazy, will naturally take advantage of the tra aspect which these examinations present; he will go whe he can obtain a license on the lowest pecuniary a intellectual terms. No wonder such backdoors are alwa open, and so many go in thereat! It is an easy proce inside. Bland examiners cursorily inspect credentials a propose stock questions, a few delicate attentions are pa to a "subject," a fee is handed to the treasurer, a *Doctor* Saisrien—smiling, happy, and wondering at h former imperfect acquaintance with his own abilities—issu forth through the front door into the world. Let us not l understood to condemn those thorough, sound, and ind pendent institutions which steadily refuse to allow a tra spirit to pollute their curriculum. But we are strong averse to the existence of a commercial animus betwe educational corporations, and to the practical denial of o of the oldest lessons of life, that excellence is only to l obtained by long and assiduous toil.

The vices which preside over such a certificating syste are naturally capable of speedy development. Doct Saisrien sets up in business in a populous neighbourho and does his best to undersell the nearest practitione His stock-in-trade (alas!) consists chiefly of his brains; an as we know, no great outlay has been necessary to licen their exercise. Rapid and venturesome (or timid) surger with therapeutics to correspond, enable our novice to achie something of popularity and a practice, until some shockin instance of maltreatment or ignorance on his part induce the Medical Council to check the future recurrence of suc disasters.

Now, what is true for medicine and surgery holds goo generally for professional chemistry. There are not ye indeed, any licensing bodies recognised by chemists, if w except the University of London and, of course, Sout Kensington Museum (whatever that may mean). A ma usually starts in life as a professional chemist, either wit no training and no certificate at all, or else with a great deal of certificate and very little training. An exceptional few are well trained and properly qualified, with or without a certificate. The majority of analytical chemists are not more than six months or a year learning their profession, and many have to depend on what local celebrity they can gain for a maintenance. They have to fight for a living against men of reputation and eminence. Hence *Professor* Saisrien feels it necessary to rush into print on every possible occasion; to "perform" analyses of every kind for a few shillings; to deliver lectures on "The Chemistry of a Four Pound Loaf;" and, ultimately, to give wonderful evidence at inquests. Of course, as he calls himself a "chemist," the public take him at his word, supposing him to a scientific man; and, as everybody knows, science gets all the discredit which may accrue when these people are employed. When waters are badly analysed at fifteen shillings, and coals at five, and arsenic is found, or not, "by desire," the public blame science. Moreover, it is notorious that some analysts uniformly get high results, others always reporting low numbers; of course, a seller or buyer knows how to take advantage of these facts. Sometimes, however, percentages can be trimmed low or high as required, which is, decidedly, a far more convenient and lucrative procedure.

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* From *The Laboratory*, August 10.

It might be supposed that these are matters into which chemists ought immediately to inquire. By no means; chemists are already perfectly well acquainted with them. What is wanted is a remedy, and this, we believe, may be provided without delay. It would not take long for a corporate body like the Chemical Society to form a scheme of examination, of thorough and practical character, requiring the candidate to have previously devoted himself for two years' training, *at least*, at some recognised school. A certificate might then be granted in analytical chemistry. Prizes might further be offered for competition to any men who would bring up original work. Secondly, a scale of fees might be agreed on, upon which the licentiate should have a legal right to recover. Thirdly, the public should insist on an analyst possessing this certificate. Fourthly, the licensing body should have power to inquire into any cases of unprofessional conduct, and, if necessary, to suspend a license.

The professional chemist is a creation of this century, and he is at present about fifty years old. His birth, parentage, education, and general mode of life, are perfectly well known to us. We are not, we must own, just now quite satisfied with him. Let us hope that some such steps as those we have suggested may be taken for his reform. In another ten years he may then become a purer, wiser, and, perhaps, repentant being.

MANUFACTURES IN PLATINUM AND OTHER RARE METALS.*

Although very badly placed in the English metallurgical department, the really dazzling collection of Messrs. Johnson, Matthey, and Co. does not fail to excite the admiration of all who are fortunate enough to find it, and it will, therefore, be gratifying to intending visitors to learn that the Commissioners have determined to have the whole case moved to a more prominent and suitable position on the Rue d'Angleterre. The value of the contents of these cases in Class 40 and 41 is considerably over 20,000*l.*, so that it is, probably, the most costly industrial exhibit in the entire Exhibition. The platinum boilers and syphons are, of course, the most prominent objects; there is one of these of sufficient capacity to concentrate 8 tons of sulphuric acid daily, and another of smaller size, which will concentrate 5 tons. Considering the many advantages attending the use of platinum utensils in the manufacture or treatment of the innumerable substances, especially those intended for food, which attack the metals usually employed, it is somewhat remarkable that it has not been generally introduced long ere this, although the reason will probably be found in the fact that the price, until Messrs. Johnson and Matthey undertook the development upon a commercial scale of the beautiful discoveries of Mr. St. Claire-Deville and others, was excessive. Even now the first cost is high, it is true, but this is far more than compensated for by the great durability and many other advantages attending its use. The price of the large boiler above referred to is now but 2500*l.* (the cost of such a vessel formerly was about 4000*l.*), whilst the smaller one is supplied at but little over 1600*l.* In their manufacture several important improvements have been introduced, but perhaps the most remarkable is that the usual gold-soldered joints are entirely dispensed with, so that the entire boiler forms, so to say, but a single piece of metal—an improvement which not only renders them much stronger and more durable, but also enables the manufacturers to sell them at a much lower price than would otherwise be possible. The system of joining is very well worthy of careful examination. The metal employed in the manufacture of these articles is specially prepared, and of chemical purity. The improvements introduced in the syphons are of great importance also, for by means of a bayonet joint the syphon can at any time be removed, and the bronze band-joints hitherto used, and which were always requiring renewal, entirely dispensed with. To facilitate the packing and cleaning of these syphons, they are now made with joints in the middle of the two tubes. There is a fine ingot of platinum, such as is used for the manufacture of the boilers above referred to, which is especially worthy of attention. The metal is chemically pure, and the whole mass was forged at one operation, under one of Naylor's patent steam-hammers, purchased by Messrs. Johnson, Matthey, and Co. from the Exhibition of 1862. Its intrinsic value is 1100*l.* There are also three ingots of cast platinum, produced by the process of Messrs. St. Claire-Deville and Debray—the oxyhydrogen gas process—of the value of upwards of 500*l.* The platinum alembic, for use in mints, refineries, and chemical establishments, could be very generally used with advantage, the work being done much more quickly than usual, in a more satisfactory manner, and without the risk of accident from the breaking of the vessel. The specimens of platinum tubes are really beautiful: they are soldered with pure platinum, and made of various sizes, and for strength and durability they are found to be vastly superior both to those soldered with gold and to those produced by compression, since the metal is not subjected to the same fatigue. There are wire, plate, sheet, gauze, crucibles, capsules, covers, sponge, touch-holes for guns, and various other preparations of platinum exhibited; and there is also some platino-iridium, expressly prepared for gunnery purposes. A nipple furnished with this metal—"Matthey's Alloy"—stood 3000 rounds from one of Whitworth's largest rifled ordnance, without showing any visible signs of wear. Specimens in various forms of the precious metals, palladium, iridium, rhodium, osmium, ruthenium, indium, magnesium, thallium, tellurium, chromium, titanium, manganese, and others are also shown; and there is a most important and highly interesting series of metals of uniform weight and configuration, showing in the most striking manner the various characteristics and actual specific gravity by comparison. Noble, rare and common metals are each represented, and each is chemically pure: they embrace gold, silver, platinum, iridium, rhodium, palladium, lead, bismuth, copper, cadmium, cobalt, nickel, iron, antimony, zinc, magnesium, aluminium, thallium, sodium, potassium, osmium (not cast), and mercury. A collection is likewise exhibited of specimens, &c., showing the two means of refining and working bullion, and the various forms presented by the noble metals, from the time of their arrival in England until they are coined. There are the metals and their solutions in various degrees of refinement and precipitation; there are the secondary products and salts, as well as the pure metals. There are some fine nuggets of gold, and specimens of the non-metallic elements, boron and silicon. Then, again, there is the sodium amalgam, which has been so successfully employed under the patents of Mr. W Crookes, F.R.S., in the extraction of gold from its ores, and with which process Messrs. Johnson, Matthey, and Co. have obtained some extraordinary results. They took a Californian ore that had been found difficult to work by the ordinary process, and having carefully sampled it, they got by the ordinary amalgamation process 2 ozs. 16 dwts. per ton, by the sodium process of Mr. Crookes 7 ozs. 0 dwts. 6 grs., and by assay 7 ozs. 9 dwts. A second trial gave results absolutely identical. A more satisfactory test of the value of Mr. Crookes's process could not be desired. There is an obelisk of pure magnesium, which is a solid casting, of the weight of over 10 lbs., and there are wire and ribbon of the same metal, as well as a magnesium plate for galvanic purposes, and a rod for toxicological experiments. These, with the models of the "John Bull" nugget, and of an immense ingot of platinum, worth some 3500*l.*, and weighing nearly 2 cwts., together with a platinum roller, and salts of various metals, make up, probably, the finest metallurgical collection that has ever been brought together.

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* From the *Mining Journal*.

VACCINATION DIRECT FROM THE COW.*

An important modification in the manner of using Jenner's discovery has just been put to a careful trial by M. Depaul, director of the vaccination department of the Academy of Medicine. The experiments originated thus :—Several years ago, M. Palasciano, the eminent surgeon at Naples, introduced and carried out a plan of conveying the vaccine virus from heifer to heifer, so as constantly to have a supply of lymph direct from the cow. At the Congress of Lyons, two years ago, M. Palasciano brought these facts before the meeting ; and the innovation was looked upon as a feature of considerable interest. At that period Dr. Lanoix, a medical man practising in Paris, thought that, for various reasons, the capital of France should have facilities for vaccinating from the cow, in preference to the usual modes of conveying children's virus by glasses, points, tubes, or from arm to arm. In fact, it was thought an advantage that the vaccine lymph should not pass through the human organism, as the lymph would thus be fresher, and the taint which certain children might attach to it would be avoided. Dr. Lanoix communicated his plan to M. Depaul and to the director-general of the Paris hospitals, M. Husson. Both these high functionaries encouraged the project; and Dr. Lanoix proceeded to Naples to study, under M. Palasciano, animal vaccination. When thoroughly instructed, he took with him a heifer upon which very handsome vesicles had been propagated. This animal was the subject of interesting and successful experiments on her journey through Lyons, and when settled at Paris was the focus from which the vaccine disease was, for the service of the public, propagated in Dr. Lanoix's establishment to cows and heifers. In the meanwhile, however, a cow was observed at Beaugency, near Orleans, bearing evident signs of the spontaneous disease. After several successive and effectual vaccinations from this animal, she was brought to Paris, at a time when Dr. Lanoix was already extensively carrying out his very useful practice. It was important that the latter should obtain an official sanction, and animal vaccinations were now extensively performed in the Paris hospitals by order of the director-general; and M. Depaul began similar experiments at the vaccination office of the Academy of Medicine of Paris. Reports on these two series of trials are now before the world; and these reports, for the guidance of those whom it may concern in this country, we proceed briefly to analyse.

Mr. Husson states that, in fifteen months, 9316 vaccinations and re-vaccinations were performed by means of Dr. Lanoix's heifers, led into the various hospitals. Of these, 1392 were men; 2457 women; and 5449 children. The operations were, as is usually the case, successful in a very limited number of re-vaccinations, varying from 16 to 17 per cent.; with children, however, the successful cases were about 50 per cent.

M. Depaul's experiments extended from the 12th of April to the end of December, 1866. The report is very long, extremely minute, of great lucidity, and is decidedly in favour of animal vaccination. The tables are drawn up with much care; and accurate drawings were taken of the appearances presented in the successful cases. A very important portion of the experiments consisted in performing numerous comparative vaccinations with lymph obtained from children. With the actual cow-pox, 681 operations were made; and with the children's lymph 897. Of the former, 421 were successful; and of the latter, 543.

Amongst the deductions appended to the report we se
the following :—

"The transmission of the cow-pox from one heifer
another is obtained without difficulty. Forty-five of tl
were inoculated, and all successfully, without suffering
their general health. The first three animals were in
lated from the Naples heifer, and forty-two others from
spontaneous virus of Beaugency. No change in the app
ance of the vesicles was observed in the later inoculation
compared with the earlier, the last heifer's vesicles wer
fine as those of the first. The development in the heif
more rapid than in the human subject. The present exp
ments show that it would be possible to organize in g
centres of population, at very moderate cost, offices
animal vaccination. Spontaneous cow-pox is not so rar
has been supposed; two opportunities occurred during
course of these experiments. The amount of lymph yie
by each hiefer is considerable. From the trials caref
made it becomes evident that syphilis is not transmissibl
the bovine species. Failures as to vaccinations were ra
frequent when the lymph was taken after the seventh
and incubation upon children vaccinated with the cow-
may last between five and twelve days; but the vesicles
larger when cow-pox is used instead of children's p
With cow-pox three or even four vesicles may form aro
one puncture. Cow-pox lymph, like the lymph obta
from children, fails pretty often when kept for some
between glasses or in tubes. *Re*-vaccinations were
sufficiently numerous to allow of any decided conclusi
Years must elapse before it can be distinctly ascerta
whether the protection obtained by cow-pox inoculatio
more durable and complete than when children's lymp
used. In case of an epidemic of small-pox reigning, at
same time, in several localities more or less distant from
another, it will be possible to send to such localities or
more heifers with the cow-pox upon them, so that vac
tions and re-vaccinations might be performed on a l
scale."

With these facts before them, it behoves the professi
this country to look carefully and earnestly into the ma
If the population of these islands can be benefited by
change alluded to above, we do not see why, after due
sideration and investigation, it should not be made
would be premature to jump at a conclusion, especiall
the report distinctly states that cox-pox inoculations ar
a considerable improvement upon vaccination from child
but the desire to obtain perfectly pure lymph free from
possible taint may, perhaps, have great weight in
decision.

PREPARATION OF STANDARD SOLUTIONS SULPHURIC ACID AND AMMONIA.

BY ROBERT GALLOWAY, F.C.S., PROFESSOR OF PRACT
CHEMISTRY, MUSEUM OF IRISH INDUSTRY.

In collecting materials for a work on technical analy
have been led to determine the specific gravity of a sol
of sulphuric acid (HO, SO_3) containing an equivalent o
acid in 1000 gr., and the specific gravity of a soluti
ammonia (NH_3) containing an equivalent of that subst
in 1000 gr. of the solution, at different temperatures, in
that standard solutions of these substances may be
readily prepared than is possible by the plans gene
given. The following are the results :—

Sulphuric acid solution, containing an equivalent o
acid in 1000 fluid grains; temperature of the solu
60° F.

Specific gravity.	Fahr.
1032·5	55°
1032·	60°
1031·3	65°
1030·6	70°
1029·8	75°
1028·9	80°

1000 measures of this acid solution increases in bulk
the temperature is raised from 60° F. to 80° F., to
measures.

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* From the *Lancet*.

* From *The Laboratory*.

Ammonia solution, containing an equivalent of NH_3 in 1000 fluid grains of the liquid; temperature of the solution, 60° F.

Specific gravity.	Fahr.
992·8	55°·4
992·3	60°·8
992·	65°
991·6	69°·8

To prepare the solutions, introduce a delicate hydrometer and thermometer into any quantity of distilled water, then add the acid or ammonia, as the case may be, until the correct specific gravity for the temperature is nearly reached; then allow time for the complete mixing of the liquids; and, finally, add water, or acid, or alkali, until the solution is of the proper specific gravity.

REVIEWS.

MILLER'S CHEMICAL PHYSICS.

Elements of Chemistry: Theoretical and Practical. By WILLIAM ALLEN MILLER, M.D., LL.D., etc. Part I. *Chemical Physics.* Fourth Edition, with additions. 8vo. Pp. xx., 643. Price 15s. Longmans.

SOME months ago we reviewed a third edition of the last section of Dr. Miller's standard "Text-book of Chemistry;" and we have now to notice the fourth edition of the first section of the same work. The *Elements* may now be taken as a complete exposition of the principles of modern chemical science. The recently published volume on *Chemical Physics,* though a fourth edition, should be placed beside the third editions of the volumes on *Inorganic* and *Organic Chemistry,* as its publication brings the whole work into harmony with modern doctrines.

The principal changes in this new edition of the treatise on *Chemical Physics,* consist in the adoption of the new system of atomic weights with the method of notation dependent upon it; and the introduction of the centigrade values for degrees of temperature, in addition to those of Fahrenheit's scale, as well as the metrical equivalents to the English weights and measures, employed in the description of processes and apparatus. With respect to the latter addition, the author observes:—

"There may be considerable difference of opinion as to the expediency of endeavouring to introduce the metrical system of weights and measures into the transactions of commerce and the concerns of daily life; but there is a general and increasing desire amongst men of science to secure the adoption of some *uniform* system in the scientific writings of men of all countries. It would not be difficult to show that the metrical system has its defects; but it is founded upon principles that are simple, intelligible, and consecutive, and it is capable of convenient application. Moreover—and this is of special importance—it is widely adopted in various countries of Europe, as well as in North America; and the number of scientific men who employ it is increasing yearly. There is, therefore, a probability that the metrical system will be generally used by men of science; and this can be said of no other system of weights and measures. I have, therefore, thought it right to introduce it side by side with our own, in order to familiarize the student with its units."

Dr. Miller, in thus introducing the metrical system, has greatly enhanced the value of his book. Had he merely given the English weights and measures, and Fahrenheit's degrees, the rising generation of chemical students would have regarded the work with little favour; for in most of the elementary treatises on chemistry which have recently appeared, the metrical weights and measures and the centigrade degrees are exclusively employed.

The present part on *Chemical Physics* resembles in many respects the *Introduction to the Study of Chemical Philosophy,* by the late Professor Daniell, with whom Dr. Miller was for many years associated both as pupil and fellow-lecturer. It may be described as a treatise on physics, specially adapted to the requirements of the student of chemistry. Some of the subjects discussed in its pages are, however, purely chemical. The scope of the work is indicated by the following brief synopsis of its contents:—

Chapter I. is devoted to Chemical Attraction, the Laws of Combination, and the Symbolic Notation used in representing chemical changes. A considerable portion of this chapter has been re-written for the present edition, and altogether it forms a most satisfactory introduction to modern chemical philosophy. A table of the elementary bodies, with their symbols, atomic weights, and most important compounds, is included in this chapter.

Chapter II. treats of weights and measures, the balance and specific gravity.

In Chapter III., some varieties of molecular force are minutely considered under the general heads—Elasticity, Cohesion, Adhesion, and Crystallization. The recent researches of Deville and Graham upon the permeation of metallic septa by gases at elevated temperatures are fully described in this chapter, which extends over a hundred pages.

Chapter IV. is devoted to the Phenomena of Light, and contains much new matter. An account of the investigations of Gladstone and Dale, and of Landolt, on the connection of the optical properties of bodies and their chemical composition, is a valuable addition. The section on Spectrum Analysis (Dr. Miller's great subject) has also received important additions. The section on the Photographic Actions of Light has been wisely transferred from the second volume, in order that the chapter on Light in the present part may be complete.

The subject of Chapter V. is Heat; and as the successful prosecution of chemical research depends in great measure upon the due understanding of its laws and applications, Dr. Miller has spared no pains to render this chapter a thoroughly practical treatise.

Chapter VI., which runs through more than two hundred pages, is an exposition of the phenomena of electricity and magnetism. Like the chapter on heat, it is remarkable for lucid explanations and minute details. It contains much new matter of great interest, such as the account of the British Association standard of electrical resistances, and descriptions of the extraordinary machines of Holmes and Wilde for producing light by magneto-electric currents.

The Appendix consists of a most useful series of tables, and the Index is a good example of what an index to a standard scientific work ought to be.

The volume is beautifully printed, and is enriched by no fewer than 274 carefully-executed wood engravings. It is really a very cheap book, though its price may seem high to the poor student. We strongly advise our readers to purchase it, even when they cannot afford to secure the remaining volumes, for it is complete in itself, and is a rich mine of precious scientific truth. On a former occasion we stated that Miller's *Elements* has always been looked upon as the foundation stone of a chemical library. We now say that the part on *Chemical Physics* may be advantageously added to any library that contains solid works of reference.

The publication of Mr. Brough's paper on "The Chemistry of the Codex" is unavoidably postponed.

The next number of the CHEMIST AND DRUGGIST will contain a full report of the proceedings of the British Pharmaceutical Conference at Dundee.

WE have to announce, with profound regret, the death of the Wife of the Editor of this Journal. We should hesitate to lift the veil of domestic sorrow, but the gracious lady, who is no longer with us, had endeared herself to so wide a circle. And to him who, during past years, has revised these pages, not only with never-wearying kindness, but with consummate ability, we, some of his contributors, desire thus publicly to offer our condolence; nor will we, who have so often rejoiced in his happier moments, be forbidden now to share his grief.

THE CHEMIST AND DRUGGIST

LONDON, AUGUST 15, 1867.

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Everything intended for insertion in the current Month must be sent in before the 10th, except Employers' and Assistants' Advertisements, which will be received until 9 A.M. on the morning previous to publication.

THE VALUE OF A TITLE.

Many excellent pharmaceutists have expressed a natural regret that trade legislation can only be effected by the relinquishment of some personal advantage. Without entering on the general question, which is too broad for discussion in a single article, we are compelled to remind our readers that a point of weakness has been entirely overlooked; and to this alone we desire, just at present, to direct attention. One grand incentive for desiring the establishment of Pharmacy by law was the known secondary value of a certain title, which should have been a distinctive honour. It was seen with bitter regret that the position of the true pharmaceutist was, and might be legally invaded by the unscrupulous, and that the public were slow to understand the peculiar merit of a "pharmaceutical chemist," for which they were scarcely to be blamed, since, under existing circumstances, many of unquestionable ability did not bear the title, while a crowd of utterly unqualified persons practised pharmacy under a mere variation of the name.

We can scarcely imagine a more hopeless chaos, nor from such a complication can we see any other possible escape than that a society, professing to govern English Pharmacy, should cease to remain a voluntary association.

So long as any discontented grocer, setting a higher commercial value on pharmacy than on figs, may compete with his examined neighbour, and assume a title near enough to deceive the public, the mystic letters M.P.S. are painfully diminished in importance. With an eclectic few, they may possess due weight; but it is idle to suppose that the mass appreciate such nice distinctions. Let it once become law that, after a certain date, no man in England shall practice pharmacy without passing through the ordeal of an examination, and sooner or later the very existence of a pharmaceutical establishment will be a guarantee for the competency of its owner.

At present, the outward and visible sign of pharmacy means nothing; it may be Faraday, or our friend the grocer, serving behind the counter. Nor is it in any way an argument to the contrary that since the Government will not trample on vested interests, many incompetent persons must at the outset be included. The harm is of less importance than has been imagined, since incompetency is not catching. Nothing can ever detract from the acknowledged skill and well-earned reputation of those whose names are already household words.

Even in their case the title should have its full significance. We hold that an intelligent young men, who has accepted pharmacy for his vocation, and by diligent study, and expenditure of time and money, has duly qualified himself for his career, should be, to a certain extent, protected in his rights. And it was thought by some who had a keen sense of honour, that it was a practical injustice to reward him only by an exemption from a jury, and a paper testimonial.

Nor is there a doubt but that the present unsettled state of English pharmacy deters many of our best men from entering our ranks—anything in heaven above, the earth beneath, or the waters under, so as to steer clear of trade. It is obvious that where laborious preparation is crowned with so small and little-guarded advantage, the attainment of the higher standing of professional life is inevitably suggested. A shade more exertion applied to a more extended curriculum of study will secure a title conveying privileges, with which none will venture to interfere. The Pharmaceutical Society has been wonderful in its success, but it cannot achieve impossibilities, a fact to which its founders (thoughtful and honourable men) are quite alive. New circumstances have arisen compelling a wider range of action. The time has come when a nobler destiny is before it; indeed, the very object for which it was originally created—that is no other than the establishment of pharmacy by law, and the consequent foundation of a true United Society, which now waits only the details of its organization.

PARIS UNIVERSAL EXHIBITION.

(FROM OUR SPECIAL CORRESPONDENT.)

CLASS XLIV.

CHEMICAL AND PHARMACEUTICAL PRODUCTS.

Continuing our tour through the French department we next come to Merle's display of soda and alumina salts, including a fine specimen of crystallised sodium. Close by we find Kuhlmann, of Lille, who shows potash and soda compounds, silicates, and illustrations of his process for preserving stone. The potash salts are prepared from the refuse left after the manufacture of sugar from the beet-root. The residuary liquors are boiled to a syrupy consistence, after having been neutralised by lime. The treacly mass thus obtained is burnt in a reverberatory furnace, care being taken to prevent too great a heat, which would transform the sulphates present into sulphides. It is then broken up, ground between rollers, lixiviated, and the solution filtered. The clear liquid contains potash, chiefly in the form of carbonate mixed with sulphate and chloride. By evaporating down at various temperatures, the different potassic salts crystallise out separately, the chloride and sulphate being afterwards converted into carbonate by Leblanc's soda process. The extraction of potash from beetroot ash is, we believe, being at present carried on by several chemical firms in our own country. The Company of the Salines de l'Est exhibit specimens of soda salts; also a number of compounds, such as caustic soda, hyposulphite of soda, peroxide of manganese, sulphur, etc., recovered from soda-waste by a process as yet unpublished. Kestner shows mineral acids, tartaric and paratartaric acid, tin salts, and nitrate of copper. Taking a glance at the alkalies and sulphur shown by two exhibitors, Daniel Mohr and Renard, we retrace our steps down the middle of the class. Here we find Boyer exhibiting borax made from hayesine from Peru and Bolivia, and borate of lime from California. Clouet also shows borax made from tinkal. Cazalis and Canvy show some excellent specimens of tartaric acid, but they are hardly up to those shown in our own department. Guibet exhibits well crystallised protosulphate of iron. Maumené and Rogelet show specimens of potash salts obtained from *suint*, a kind of natural potash soap found in wool, being excreted by the sheep with the perspiration. The solution of *suint* is obtained from the wool-washers, who are encouraged to wash their wool more thoroughly than formerly, by thus being able to sell the wash-waters at a profit. Iodides and bromides of good quality are shown by Tissier Aîné, Carot, Paisant, Cournerie, and several others. Some crystals of iodine, exhibited by Roques, are very beautiful. Tessié de Motay contributes specimens of fluosilicates and fluosilicic acid for glass engraving. Still keeping in the middle, we give a passing glance at some fine crystals of yellow and red prussiate and sulphocyanide of potassium, shown by Giles, and pass on to M. Lamy's modest little case, which contains a number of specimens of thallium salts of a very interesting character: amongst them may be mentioned thallium alum, in almost perfect octahedra; thallium flint-glass, which is of a fine pale topaz colour, and might be well used for ornamental purposes. Its density is not less than 4·25, and it is said to have very valuable optical properties. The ethylthallic alcohol is also a very singular compound, having a specific gravity of 3·600, water being taken as 1·000. Coblentz Freres show some very beautiful specimens of compounds derived from benzol, toluol, and naphthalin. A magnificent mass of crystals of the latter body attract great notice. John Casthelaz shows similar compounds in great variety. Amongst them is a new substance, chloroxynaphthalic acid, which gives very beautiful coloured precipitates with the metals. If this acid could be cheaply obtained these compounds would no doubt form valuable pigments.

Belgium and Holland show a few rough chemicals, but none of them call for special notice. The former country has, however, the credit of showing one of the finest displays of compounds of purely scientific interest in the whole Exhibition. We allude to the series of derivations of phenol, amounting to nearly 100 in number, all prepared with the utmost care by M. Körner, the eminent Belgian chemist.

Prussia contributes many objects of the greatest interest, but we must be content with doing little more than glance at them. First will come the collection from the Stassfurt salt mines. These mines not only produce ordinary rock-salt in enormous quantities, but also a variety of minerals containing potash, such as *carnallite*, a mixture of the chlorides of potassium and magnesium; *sylvin*, which is almost pure chloride of potassium; *kainite*, which contains the sulphates of potash and magnesia and chloride of magnesium; *polyhalite*, which is made up of the sulphates of potash, magnesia, and lime; and several others, containing not only potash, but also iodine, bromine, and boracic acid. It is singular that such bodies as potash, hitherto derived from the vegetable kingdom, bromine and iodine, which have always been drawn from marine sources, and boracic acid, a volcanic product, should now be all found together. Dr. Frank shows a fine series of iodides and bromides, also the metalloids themselves. The method of separating the different salts is very ingenious. They occur in many parts of the mine in nodules in a state of heterogeneous mixture, but on being thrown into a salt vessel containing a saturated solution of common salt they separate into layers, according to their specific gravity, and may thus be sorted without difficulty. Might not this method be applied to the separation of ores from their gangues? Trommsdorff shows a splendid series of rare salts, such as those of cæsium, rubidium, lanthanum, didymium, glucinium, erbium, terbium, zirconium, cerium, niobium, thallium, etc. All these salts are pure, as M. Trommsdorff proved conclusively by means of the spectroscope, at a meeting of scientific men lately held in Paris. He also shows several of the double platinum salts, which exhibit the property of dichroism most beautifully. The double cyanide of platinum and magnesium, for instance, is bright red in one direction, and a brilliant green in the other. The barium salt is orange yellow and violet. M. Trommsdorff also show several of the salts of violuric acid, a body derived from uric acid, lately discovered by Beyer. The potash salt seems to be a purple powder of great beauty. Several rare alkaloids are also to be found in M. Trommsdorff's case. This display is undoubtedly the finest collection of rare chemicals in the whole exhibition. Schering shows iodides and bromides of good quality, and a number of ordinary chemicals. He also shows some scale preparations, which are a decided improvement on most of the foreign specimens. Haen shows phosphoric acid, cast in beautifully transparent sticks, glycerine, and a number of fine chemicals. He shows some double sulphate of iron and ammonia, of a peculiar dirty purple colour. Dr. Marquaadt, of Hanover, shows some fine specimens of lithium salts, also molybdic acid, and several molybdides, rubidium alum, crystallised extract of bismuth and nicotine. Curtius exhibits sulphuric acid, nitric acid, and sulphate of alumina. Kunheim shows sulphocyanide of ammonium in splendid crystals, soda crystals, verdigris, and other rough crystals. Dr. Schuckhardt's collection of rare salts would be most interesting, but as they are exhibited it is impossible to examine them. When will exhibitors study exhibiting as an art? The Exhibition of 1867 really seems to have been specially held for the purpose of showing that manufacturers as a rule neither care nor know how their products should be exhibited. The display of colours and aniline dyes in the Prussian department is extremely good, but we can do no more than indicate the fact.

PERFUMERY AT THE UNIVERSAL EXHIBITION.

The space devoted to the English display of perfumery at the Paris Exhibition is extremely small, the cases of our leading perfumers being crowded together into a square hardly larger than a good sized drawing-room. We need hardly say, that Mr Rimmel is represented by a tasteful fountain continually flowing with delicious scent, and by an attendant water nymph who dispenses her sweet-smelling gifts to the world and his wife in the most generous manner.

Messrs. Piesse and Lubin are also not far off. One of the principal novelties shown by the latter is the essential oil of the Lign-aloe, a tree mentioned in scripture as yielding a delicious perfume. It is, we believe, the first time it has made its appearance in Europe. The only other novelties are Mr. Rimmel's Ihlang-ihlang, a Japanese scent of very delicate odour, and the scent obtained from the *Lilium auratum*, by Mr. Price. Mr. Lewis shows iodine and other medicated soaps, and Mr. Pears the transparent soap for which he has long been famous. The case of Messrs. Atkinson attracts great notice, from the tasteful manner in which it is arranged. In the Park, Mr. Rimmel has built a pretty little kiosk, where the process of distillation is shown to all comers. On shelves round the walls are a large series of specimens of the essential oils, and in several cases dried samples of the plants from which they are obtained. The apparatus used in the *enfleurage* process is also shown. Mr. Rimmel's fame in Paris, Madrid, and Lisbon, being as great as it is in London, his little distillery is continually crowded with visitors. In Class 44, Price's Patent Candle Company show their new invention called by them solidified glycerin, which consists of soap dissolved in that substance in the proportion of 50 per cent. That alkaline stearates will dissolve in glycerine to such an extent is, we believe, a hitherto unascertained fact, but in any case we can personally testify to this soap being the pleasantest we ever used. We trust that "rattening" is not practised amongst the makers of violet powder, but whether it is or not we must give it as our opinion that the Company's solidified glycerin will utterly abolish the powder puff from the nursery. It seems a pity that this really valuable invention was not exhibited in its proper place amongst the perfumery.

BRITISH PHARMACEUTICAL CONFERENCE.

The Fourth Annual Meeting will be held at Dundee, at the Ward Chapel Meeting Rooms, Ward-road, under the presidency of Professor Bentley, F.L.S. It will commence on Tuesday, the 3rd of September, at 10 a.m. After the usual preliminary business, the President will deliver an address: the reading and discussion of papers on pharmaceutical subjects will then commence, be continued in the afternoon till 4.30, and be carried on during Wednesday; an adjournment from 12.30 till 2.0 taking place each day. On Thursday, the Dundee chemists invite the non-resident members of the Conference to a picnic at "Craighall," a romantic spot near Blairgowrie, twenty-two miles north of Dundee; to an inspection of Glammis Castle and grounds in returning from the excursion; and to a supper at Dundee in the evening.

The "head-quarters" of the Conference will be at "The Dundee Arms Hotel," 7, Crighton-street, which has, by the kind thoughtfulness of the Local Committee, been engaged for the sole use of the members of the Conference. Here all will have the opportunity of fraternizing, dining, etc., and sleeping. The comfort, economy, and pleasure of all would be greatly promoted if every member who intends visiting Dundee would undertake to stay at this hotel,—communicating his intention, as soon as possible, to the Local Secretary, Mr. Hodge, 249, Overgate, Dundee. The arrangements for the excursion would also be much facilitated by an early acceptance of the invitation, addressed to the Local Secretary.

The neighbourhood of Dundee affords several points of interest to strangers, but the presence in the town of the members of the British Association for the Advancement of Science from the 4th to the 11th of September, will render visit to Dundee at this time more pleasant than usual.

OFFICERS FOR 1866 7.

President—R. Bentley, F.L.S., M.R.C.S., Professor o Botany in King's College, London; Professor of Materi Modica and Botany to the Pharmaceutical Society.

Vice-President who has filled the Office of President—H. Deane F.L.S., Clapham Common, S.

Vice-Presidents—D. Hanbury, F.R.S., London; W. W Stoddart, F.G.S., Bristol; J. Ince, F.R.G.S., London; J Hardie, Dundee.

Treasurer—H. B. Brady, F.L.S., F.C.S., Mosley-street Newcastle-on-Tyne.

General Secretaries—Prof. J. Attfield, Ph.D., F.C.S., 17 Bloomsbury-square, London, W.C.; R. Reynolds, F.C.S 13, Briggate, Leeds.

Local Secretary for Dundee—Mr. J. Hodge, 249, Overgate.

Other Local Secretaries—Mr. Pooley, Bath; Mr. Dymond Birmingham; Mr. Atherton, Nottingham.

Auditors—Mr. C. Welch, Mr. W. H. Parker, Nottingham.

Committee—J. C. Brough, Stockwell, S.; S. Gale, F.C.S 338, Oxford-street, W.; T. B. Groves, F.C.S., Weymouth A. F. Haselden, 18, Conduit-street, W.; S. U. Jones, Lean ington; G. F. Schacht, Clifton; R. Fitzhugh, F.C.S., Notting ham.

Dundee Local Committee—Mr. Hardie, President; Mr. Hodg Secretary; A. B. Anderson, W. Doig, P. G. Donald, D. F Ferrier, G. Jack, C. Kerr, W. Laird, A. M. Levie, G. I Mackay, D. J. M'Kinnon, A. Rattray, D. Russell, P. Sand man, D. Watson.

MEMORIAL TO THE EXECUTIVE COMMITTEE OF THE UNITED SOCIETY OF CHEMISTS AN DRUGGISTS.

The following document, signed by forty-three assistants i Brighton, has been received by the Executive Committee:-

"We, the undersigned chemists' assistants residing a Brighton, beg to call the attention of the Executive Con mittee of the United Society of Chemists and Druggists t the resolution moved by Mr. Carteighe and carried *nem. co* at the anniversary meeting of the Pharmaceutical Societ viz., 'That it be a recommendation to the Council that the arrange, if practicable, for assistants and apprentices at th time of the passing of the Act not being made eligible fo membership without passing the minor examination."

Now, we consider that if the above resolution is carrie out, an act of gross injustice will be committed toward those who form the majority of chemists unconnected wit the Pharmaceutical Society; and we regret to perceive i this action of the pharmaceutical chemists who passed th resolution, that latent antagonism to chemists outsid their Society, which has so long, we fear, retarded legisl tion and caused chemists and druggists to look upon the Society as a small body who appear to limit their desire t benefitting themselves. We would, therefore, respectfull urge upon the Committee the necessity of accepting nothin short of the Bill as originally drafted in accordance with "th Committee's suggestions," and agreed to by the Pharm ceutical Council on the 19th of February last.

THE BRITISH AND LONDON PHARMACOPŒIA COMPARED FOR THE USE OF SUBSCRIBERS.*

All the important preparations of the London Pharm copœia are now contained in the British Pharmacopœi and, with very few exceptions, the composition and strengt of the medicines remain unaltered. In a few instances, however, it has been found necessary to make some alterations, so as to establish uniformity, and to make the same medicines applicable in England, Scotland, and Ireland, as contemplated by the Legislature in providing for the publication of a British Pharmacopœia.

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* From the *Pharmaceutical Journal* for August.

The following are the only material changes requiring the special attention of physicians who have been accustomed to prescribe from the London Pharmacopœia:—

Acetum Cantharidis.	Rather stronger than the L. P., but not so powerful as the Edin. and Dubl. preparations.
Acidum Phosphoricum Dilutum.	Stronger than the L. P., in the proportion of 10 to 8·7.
Decoctum Aloes Compositum.	Rather stronger of aloes than L. P., but not so strong as in 1864. It now contains 4 grains of extract of aloes in a fluid ounce.
Emplastrum Belladonnæ.	Made with an alcoholic extract of belladonna. Adheres to the skin without an adhesive margin.
Liquor Arsenici Hydrochloricus.	This is nearly three times the strength of *Liq. Arsenici Chloridi, Lond.*, being now made to correspond in strength with *Liquor Arsenicalis*. It contains ½ grain of arsenious acid in f ʒi.
Liquor Morphiæ Acetatis, and Liquor Morphiæ Hydrochloratis.	Half the strength of L. P. They contain ½ grain of morphia salt in f ʒj.
Pulvis Antimonialis.	More active and more definite in composition than the *P. Antimonii Compositus, Lond.* It now consists of 1 part oxide of antimony and 2 parts phosphate of lime.
Pulvis Cinnamomi Compositus.	Long pepper omitted, making the composition similar to *Pulv. Aromaticus, Edin.*
Pulvis Cretæ Aromaticus.	The dry ingredients of *Confectio Aromatica, Lond.*
Spiritus Ammoniæ Aromaticus.	Stronger in spirit, and about one-half stronger in ammonia, than L. P.
Spiritus Juniperi, ,, Lavandulæ, ,, Menthæ Piperitæ, ,, Myristicæ, ,, Rosmarini.	Stronger and more definite in strength than the L. P. preparations. They all contain 1 volume of essential oil in 50 volumes of the spirit.
Tinctura Aconiti.	One-third the strength of L. P.
,, Belladonnæ	About half the strength of L. P.
Vinum Opii.	Rather weaker than L. P. It contains 1 oz. extract of opium in a pint.

HAY FEVER.*

In Great Britain, the haymaking season often commences in the south in the early part of May; towards the north it is July before the grass is cut, and in the Yorkshire wold districts and Scotland the 12th of August sometimes sees the hay-making unfinished. Practically speaking, the aroma of new hay pervades the country for the best part of four months in the year. There are few of us who are not acquainted with at least one or two persons who suffer grievously from what is known as hay fever. To them the summer is a protracted period of torment spent in flying about from point to point, as the haymaking threatens to pursue or surround them. They take refuge sometimes in achts, but mostly by the seaside, where, nevertheless, an inland breeze, sweet as it may be to other noses, comes to them only as a malignant blast of the enemy. These nlucky people seem as if they were for ever catching violent everish colds; they are perpetually weeping and sneezing, restless, ill at ease, and generally uncomfortable. This continues with more or less severity, sometimes only for two or three weeks, until the smell of the hay has quite gone; sometimes for nearly the whole summer without any apparent reason, but leaving the patient weak, exhausted, and out of sorts. The cause is commonly supposed to be the emanations which are given out by certain flowering grasses, and the rind of pungent vegetable powder suspended in the air when these grasses are cut, dried in the sun, and tossed about in order to turn them into hay. Others suggest that it is due to the benzoic acid which is extracted from some grasses by the solar heat. It appears certain that the well-to-do and sedentary classes are much more subject to the attacks than the poorer classes and outdoor labourers who, from their hardy habits and probably from the more frequent and active action of the skin, are almost entirely exempt from them The subject has been written on lately by several medical men—Drs. Abbotts Smith, Pirrie, and others. The last-named gentleman is inclined to believe that there are two distinct maladies which are commonly confounded with each other. The first, or genuine hay fever, is a purely spasmodic affection, a kind of asthmatic seizure occurring in certain constitutions, and arising really from the inhalation of pungent vegetable odours. It is characterized by every sympton of a violent and distressing cold, but makes its appearance at a time when ordinary catarrh or bronchitis is rare. In the other kind these features also exist, but they are subordinate to others in addition of a more serious class. The scalp is hot, the head and spine ache, there is intolerance of light and heat, great general languor and prostration, a good deal of fever in the evening, and sometimes a teasing cough. It is suggested that the last kind, though called hay fever, and occurring in the hay season, is not genuine hay fever, and has nothing to do with it, but that it is in fact sun fever arising from the effects of solar heat, and has been confounded with the other simply because hot weather is also the time for making hay, and both therefore appear at the same season. In support of this view, the following reasons are advanced. That persons are attacked by it when at sea, where obviously vegetable odours could not reach them; that its duration on shore begins with the hot weather, and outlasts the haymaking season, and is indeed always more protracted than hay fever. The patients always themselves refer it to exposure to solar heat, and invariably complain of a special train of symptoms, as spinal tenderness, sleeplessness, headache, etc., not present in common hay fever. They also of their own accord shun the sun and all strong light, and gladly retire to a darkened room and a cooler atmosphere. Moreover, it does not yield to the ordinary treatment of hay asthma, such as sedatives, antispasmodics, medicated vapours, but rather requires nervine support, tonics, cold sponging, etc., the disease being in fact in the cerebro-spinal and nervous systems. Of these maladies, both so troublesome, and one somewhat serious, neither appears to be hereditary but constitutional or idiopathic.

"THE PUFF OBLIQUE."*

Sheridan has given us illustrations of various kinds of "puffs." It is doubtful which of these is the most objectionable in a professional point of view; but it is clear that under ordinary circumstances they are all to be reprobated. Men who would shrink from employing the "puff direct" by advertising that they cure consumption or any other disease by certain remedial agents, if they do not sanction, do not condemn the use of "the puff oblique," or the "puff by implication." It has now become very common to advertise "remedies" for diseases of various kinds, with the name of the physician or surgeon who uses and recommends them blazoned forth by the advertiser. We should be glad to know if the practitioner, whose name is thus blazoned forth without protesting against it, differs from the employer of the "puff direct," who advertises that he cures diseases by particular remedies? It is very well for him to shelter himself behind the plea that it is the druggist and not he who advertises. But it is well known that the practitioner commonly gives his tacit permission for the appearance of the puff, and that, with one or two exceptions, he has not insisted upon its discontinuance. The practice of puffing in this manner has become offensive in many instances, and ludicrous in others from the absurdly small importance of the "remedies" lauded.

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* From the *Pall Mall Gazette*, Aug. 9.

* From *The Lancet* of Aug. 10.

LIEBIG'S ARTIFICIAL MILK.

The illustrious chemist of Munich has addressed to the President of the Academy of Medicine of Paris the following letter, in which he replies to the criticism to which he has been subjected in the medical journals of Paris:—

"Munich, July 11, 1867.

"Monsieur le President,—I beg you will be good enough to rectify some errors which have crept into the remarks of several members of your illustrious Academy upon the subject of the food which I have proposed for suckling children. M. Poggiale says: 'According to the analyses of Boussingault and those made by myself, the milk of the cow contains, on an average, 36 parts of caseine, 40 parts of butter, and 50 to 52 parts per 1000 of sugar of milk. In this milk, then, the proportion of the plastic element caseine to the respiratory elements sugar and butter is as 10 to 22, and not, as M. Liebig asserts, 10 to 30. Again, in the milk of a woman, according to the analysis of Haidlen, the same proportion is as 10 to 24, and not 10 to 38, which, probably, owing to a typographical error, is the proportion asserted by M. Liebig.' I am extremely thankful to M. Poggiale for the pains he has been at to give me instruction in the field of physiological chemistry. Nevertheless, I must assure him that my figures do not contain a typographical error. I even think that a little reflection would have sufficed to teach M. Poggiale that the method he has adopted to determine the proportion of the plastic substance to the respiratory elements is an entirely inadmissible one.

"It is well known that the quantity of heat produced by a portion of fat is very much greater than that produced by an equal portion of sugar of milk; and it is thus evident that the respiratory effect of these two substances is very different; and as milk contains butter and sugar in very variable quantities, it follows, as a matter of course, that one cannot determine the physiological value of a given milk by the figures which indicate the proportion of the caseine to the respiratory elements sugar and butter. These are truths which are taught in the elementary courses of physiology.

"Conformably to the principles which I have explained in my 'Letters on Chemistry" (Letter 30)—principles which are admitted by every physiologist for arriving at the exact proportion of these constituents towards each other,—in these aliments, it is necessary to transform, by calculation, the fat and the sugar of milk into their equivalent value of starch. It is by the aid of figures thus obtained that one is enabled to determine with exactitude the nutritive value of aliments obtained from the animal kingdom, such as flesh and milk, as well as of those derived from the vegetable world. In this way, one is enabled to compare the different sorts of milk, one with another, and with wheaten flour, etc. In my first article on my aliment for suckling children ('Annales de Chimie,' t. cxxxiii., p. 338), I said: 'Admitting that 10 parts of butter produce the same quantity of heat as 24 parts of starch, and that 18 parts of sugar of milk produce the same amount of heat as 16 parts of starch, we find that when we express the butter and the sugar of milk as starch, the following proportions are obtained:—

	Plastic Elements.		Respiratory Elements.
In woman's milk . . .	10	to	38
In the milk of a cow . . .	10	,,	30
In the milk of a cow (skimmed)	10	,,	25
In wheaten flour . . .	10	,,	50

The milk of a woman is richer in salts than that of the cow, and it possesses a greater alkalinity; it contains more free alkali, and this alkali in the various sorts of milk is always potassa.'

"I will quote another remark of M. Poggiale. He says, 'When this analysis (Haidlen's) was cited for the first time in 1844, M. Liebig gave it as having been made upon the milk of a sick woman.' It is certain that I have never spoken of milk as derived from a sick woman, for the woman in question was robust, and in perfect health.

"At the sitting of the 25th of June, M. Depaul communicated to the Academy that he had made me acquainted with his experiments, and that he awaited my reply. But not having been made acquainted by M. Depaul with his results, I conclude that he has renounced his desire to receive my opinions thereupon.

"M. Larrey has remarked that the 'Liebig milk' had been announced with a great flourish of trumpets in the advertising pages of the journals. One of my friends, nevertheless, assures me that up to the 25th of June, the day of the sitting, no announcement of this milk had appeared. But I have no doubt that we very soon shall see it announced. I purpose making the remarks of M. Guibourt the subject of another letter.

"As for the experiments of M. Depaul, I am led to believe that they are about to be tested by persons whose qualifications to pronounce a judgment upon them are indubitable.

"In conclusion, I must assure the Academy that I have never had the pretension to wish to substitute for maternal milk, when we are enabled to get it in a sufficient quantity, the preparation proposed by me, which certainly is, as M. Boudet expresses it, in respect to its density, its savour, and its composition, a very bad imitation of a perfect model. At the same time, it is a fact established these two years, that thousands of infants of the Teutonic race, deprived of the milk of their mothers, and nourished with this 'fantastic composition,' are thriving marvellously.

"As for the milk of the cow of a '*constant composition*,' I admit unreservedly its excellent effects; but this normal milk is somewhat of a theoretical thing, very different from the cow's milk one meets with in commerce and in large cities.

"I have the honour to be, etc.,

"Justus Liebig,

"*President of the Academy of Sciences of Munich.*"

Correspondence.

UNITED SOCIETY'S EXECUTIVE MEETINGS.

TO THE EDITOR OF THE "CHEMIST AND DRUGGIST."

Sir,—It may be a matter of surprise or disappointment to many of the readers of the Chemist and Druggist Journal to find no report of the proceedings of the United Society in the August number, unless some explanation be given.

The monthly meeting of the Executive Committe was held on Monday, August 5th, which was attended by the President, who came from Sheffield for the purpose, and the majority of the members of the Committee; but the report of the business transacted cannot, however, be given this month, in consequence of an understanding that the published transactions of the Executive Committee shall consist in future of copies of the minutes confirmed and signed by the Chairman.

The minutes of each monthly meeting are confirmed by the meeting which succeeds it, so that the transactions of the August meeting cannot be published until September.

I am Sir,
Your obedient servant
August 10. C. Buott, *Secretary.*

THE OPIUM TINCTURES OF THE CODEX.

TO THE EDITOR OF THE CHEMIST AND DRUGGIST.

Sir.—The otherwise valuable paper by Mr. Watts on the French Codex in your June number, contains an erroneous statement which I expected to have been corrected by some of your able correspondents in the following number, but as it appears to have escaped observation, perhaps you will be good enough to allow me to point it out in this.

Mr. Watts states that the Laudanum and Paragoric of the Codex are *double* the strength of the preparations under the same name in the British Pharmacopœia, and such would, indeed be the case if—as he assumes—Ext. Opii. were *double the strength of the crude drug*, but every dispenser knows by experience, and the British Pharmacopœia confirms the fact that both are given in precisely the same doses. It would then be more correct to say that the Laudanum of the Codex is *one tenth* stronger than that of the British Pharmacopœia, and that the Paragorics of the two are identical in strength.

The French preparations are more likely to be uniform in strength and less liable to produce the unpleasant narcotic effects of the British preparations.

Faithfully yours,

Birkenhead, August 5. Charles Symes.

A CAUTION.

TO THE EDITOR OF THE CHEMIST AND DRUGGIST.

Sir,—I wish you would be kind enough to spare a small pace in your widely-circulated journal, for the following rticulars of a case of swindling :—About two months ago, man, dressed as a labourer, came to my shop, and equested me to examine him, having, as he said, hurt mself by lifting a heavy weight. On examination, I found m ruptured on one side. He then asked me to give him paper stating my opinion, that he might show it to his aster, who, he said, had promised to pay all expenses. rovided with my certificate, he went round to all the most spectable inhabitants of the town, and making use of my me, obtained various amounts of money, and then decamped. As soon as I heard what he had been doing, I, of urse, called in the aid of the police, who soon apprehended m. Upon searching him, the police found two quite new sses, also several other memorandums similar to my own ich he had obtained from chemists, who, like myself, had en induced to give them by charitable motives, never pecting that they would be used for swindling neighbours. was convicted, and sentenced to two months' imprisonent with hard labour. I have had another man call on me ce the above, with the same kind of request. I merely d him to be off, or would have him locked up. I heard erwards that a man, answering his description, had been aining money from the benevolent in a town only a few les distant, by the aid of a written certificate given him a very respectable chemist to take to some one whose me he mentioned. I trust the publication of the above ts will be the means of putting all chemists on their rd, when strangers wish to be examined, and require tificates.

Yours truly,

A Country Chemist.

[The above note ought to deter chemists and druggists n taking upon themselves the duties of surgeons. No mist ought to give a certificate in a purely surgical case, n though he may be perfectly competent to give an ion. Ed. C. & D.]

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he Exhibition Jury Reports.—The French jury rts on the present Exhibition, which, judging from the y in publishing those for 1862, we shall receive some or five years hence, are to be edited by M. Michel valier. The principal contributors will be MM. Augado, ard, Becquerel, Brongniart, Frémy, Liebig, Milneards, General Morin, Nélaton, Niepce de St. Victor, en, Peligot, de Quatrefages, Sainte Claire Deville, nard, Tresca, and many others of equal note.—*Laboratory.*

NOTES AND QUERIES

H. T. D. (Tavistock).—"Copland's Medical Dictionary" must be the work recommended. We prefer it to the other work. The last edition was noticed in our journal for January, 1866.

Z. Y. X. writes : "Could any of your subscribers inform me what ingredient, and what proportion of same, is used in Shropshire and adjoining counties, for colouring the "fly powder for sheep," so as to make them a dark blue or brown colour. I find Bole Armenia and Venetian red gives too bright a red."

The Price of a Leech in Prussia.—A curious announcement periodically occurs in the official part of th, Government organs of Prussia. The "Minister for Spiritual Educational, and Medical Matters" solemnly proclaims every half-year we believe, what for a certain period and throughout all the parts of the Prussian monarchy shall be the price of a *leech*. The tariff has just been fixed at the beginning of this spring time, and we are delighted to be the first to inform our readers that from April to November, throughout Prussia, Nassau included, every single leech is to cost two silbergroschen, neither more nor less. However, there is, perhaps, a moral here. One of the minutest items of "National Economy" though it be, it incidentally reveals the marvellous precision with which the whole organism of that State is regulated and watched over—a State and organism of which we knew so very little before Sadowa.—*Pall Mall Gazette.*

Water Filters at the Paris Exhibition. — To an Englishman it seems astonishing how little attention is paid here to the purification of water. It is notorious that in many districts of Paris the whole supply of water for the day is drawn from stand-pipes, which are set up for about an hour in the morning; and the water thus drawn is stored in open tubs and other vessels exposed to the air, and absorbing all the impurities which may be floating about. One would have thought that the dreadful visit of cholera last year would have done something towards remedying this state of things, and perhaps it has; but be that as it may, there is not a single water filter exhibited in the French court. Prussia makes a small show; but it is clear to all that England has taken the lead here. Mr. Spencer shows his filters, and water, both unfiltered and filtered; but the English nation must, in this matter, be fairly said to be represented by the Silicated Carbon Filter Company, Battersea, who make a magnificent display, and have opened a depôt for the sale of their goods in Rue St. Honore, 237. The company have issued their lists in French, and sell at French prices. From their agent we learn that the refrigerative filter is the favourite with the Parisians. The poorer classes are, in this respect, so much behind us that nothing less than another attack of cholera is likely to create any demand in those quarters; but with a view to bring pure water within their reach, this company exhibit some filters sold in Paris at the price of three francs each. —*Engineering.*

Recreative Science.—A penny contemporary, "The World of Science," lately edified its readers by an article on the inflammable liquid said to have been prepared for the Fenians. This liquid, which is simply a solution of phosphorus in bisulphide of carbon, is introduced to young chemists as a subject for recreative experiment. "Much amusement," we are told, "may be created by the following experiment:—Moisten the finger with the solution, and make marks upon the face; for example, draw lines across the eyebrows and round the mouth, with a large spot at the end of the nose. In the dark, a most hideous appearance will be presented, the lines and spots being indicated by blue fire." We are further informed that this experiment is quite harmless. Is the writer prepared to illustrate its harmlessness by applying the solution to his own skin.—*Laboratory.*

Methylated Spirit Licence.—It will be remembered that in March last a memorial from the chemists and druggists of Bath and Bristol, praying for a reduction of the methylated spirit licence, was presented by the Pharmaceutical Society to the Commissioners of Inland Revenue. Our readers will be glad to learn that a Bill, introduced by Government, is now under consideration in the House of Commons, containing the following clause:—"After the first day of October in the year of our Lord one thousand eight hundred and sixty-seven, the annual duty payable upon a licence to be taken out by a retailer of methylated spirit, under the provisions contained in the Act passed in the twenty-fourth and twenty-fifth years of Her Majesty's reign, chapter ninety-one, shall be the sum of ten shillings." —*Pharm. Journal.*

The South Kensington System.—A series of examinations has been instituted for granting certificates to candidates, declaring them competent to teach particular branches of science. These examinations are held at South Kensington and in the larger cities of the empire, in twenty-two subjects, and candidates may take certificates in one or a dozen subjects. A candidate may fail utterly in eleven out of twelve, and yet receive a first-class certificate for the twelfth. For example, suppose he takes chemistry, acoustics, light and heat, and magnetism and electricity; he may be rejected in the last two subjects; and yet he may receive a first-class certificate in chemistry, and be sent forth as a highly competent teacher of this science. We need not comment on this. Every one who knows anything about chemistry is aware that it cannot be properly understood, much less taught, without a tolerably good knowledge of the principles of light, heat, and electricity.—*Laboratory.*

French Photographs.—It seems to be generally admitted at the Exhibition, that the pictures of Adam Solomon, an artist of Paris, are pre-eminent in excellence. Photographic artists, who plumed themselves upon their merits, look upon the productions of Solomon with astonishment. Says the *Photographic News*:—"The first excellence is the admirable arrangement of light and shade throughout the picture, as produced by the lighting and the skilful disposition of draperies, accessories, and background, on none of which is, in any case, the touch of a pencil to be found. The perfection of the chiaroscura, the rich depth and transparency of the shadows, the perfect modelling and effect of solidity and relief, not in the head simply, but in every part of the picture, are not qualities to be obtained by retouching; and we should be sorry if any one who sees these pictures should deceive himself, and rob himself of the legitimate lesson to be acquired, by any fancy that the excellence was due to retouching, or trick of any kind, or to anything but legitimate photography of a degree of excellence very rarely attained. We do not lay any especial stress upon the fact that we have seen the negatives and the prints in the course of washing, but we earnestly urge photographers who have the opportunity, to earnestly take to heart the lesson to be obtained by a careful examination of the pictures exhibited."

New Use for the Barometer.—Mr. J. Rofe writes to the *Geological Magazine*, and shows that colliery proprietors have only to watch the barometer, and provide in accordance with its indications, for the supply of air to the mines. Alluding to the well-known "Blowing Well," of Preston, in Lancashire, he states that some time since, in a well recently constructed by him as a ceaspool to some chemical works, he observed the phenomena characterising the "Blowing Well." When the atmospheric pressure diminished, the air came from the well loaded to a disagreeable extent with the offensive vapour from the cesspool. On continuing his observations with a barometer, he found similar results. He concludes from these facts that a coal mine must be regarded as a gigantic well, from which, when the atmospheric pressure diminishes, the air expands and rushes out with great violence. This circumstance is not of itself dangerous, but if there be an excess of gas in the mine, and at the same time, from accident or carelessness, a means of ignition, then, indeed, the consequences are very likely to be serious. Hence the barometer becomes the miner's safest guide.

A Strange Telegraphic Freak.—A few weeks ago a couple of wires on the New York Central Railroad began to act very unreasonably. At ten o'clock in the morning they would "strike work," and resume at four in the afternoon. A careful examination of the line produced no result. The superintendent himself looked into the matter and saw nothing. It was a complete puzzle. An old Albany operator, however, was more successful. About sixty miles west of that city he found a point where the wires passed over the roof of a building almost touching it. As the sun rose the wires fell, and at twelve o'clock they lay snugly together on the roof. As the sun fell, they cooled and rose, and by four o'clock they were in their proper positions. Of course the trouble was rectified.—*Scientific American.*

New Base for Artificial Teeth.—Dr. G. F. J. Colburn, of Newark, N. J., has invented a substitute for rubber in dentistry, which promises to be of much value to the profession. It is in reality a cement of which the mineral asbestos is one of the ingredients. Asbestos is a very peculiar substance. It is exceedingly light, and so very fibrous in its nature, that it may be spun and woven like cloth, in which condition it resists fire, water, and many of the acids with complete success. Taking advantage of these natural qualities Dr. Colburn has, by long study, discovered additional substances, which, when united, forms an artificial base that possesses remarkable toughness, adherence, strength, and lightness. The ease and freedom with which it can be moulded is a strong recommendation. It can be readily applied to gold, platinum, and other plates. We have seen some full sets of teeth on aluminum plates that were truly beautiful. This new base contains no ingredients injurious to the health of the mouth or system. It is not affected by acid secretions, is free from all taste, and is inodorous. We hope that its merits will be thoroughly tested. Patents have been allowed.

TRADE REPORT.

During the past month the market for Chemicals has been extremely quiet; and although prices are again lower for most articles, the business done has been quite of a retail character. Several sales have been made in Tartaric Acid at 13½d. to 13¾d. for English, and 13½d. for foreign, closing at the 13¾d. for English. Oxalic has declined, business having been done at 9d. A moderate business has been done in Citric Acid, the last price accepted being 1s. 10d. Sal Acetos, in small lots, having been sold at 11d. to 11¼d. Iodine is dull, and the nominal price is 9d. Prussiate of Potass remains quiet at 12¾d. to 13d., and Bichromate at 5d. A fair business has been done in Chlorate at 11¾d. to 12d. Quinine is dull, and lower sales of French have been made at 4s. 2d., and English at 4s. 9d. Cream of Tartar is dull, and there are sellers at 82s. to 83s. Small sales are making in Sulphate of Copper at 25s. to 26s. Bleaching Powder is quiet, last sales made at 13s. 6d. to 14s. A large business was done last month in Soda Crystals at 110s. up to 115s., but is now quieter at 110s. to 112s. 6d. A good business is doing in Ash at 2¼d to 2⅜d. ex ship. Caustic Soda is steady at 17s. 6d. to 18s. up to 26s. as in quality. Bicarbonate is quiet at 15s. 6d. ex ship. Flour of Brimstone is firm, and closed at 12s. 6d. to 14s., as in quality; and Roll 10s. 3d. to 10s. 6d. Sal Ammoniac is quiet at 33s. 3d. to 36s. Sulphate of Ammonia steady at 12s. to 12s. 3d. Refined Saltpetre is firm at late prices, 22s. to 22s. 6d. Linseed Oil is dull, and prices have declined to 38s. 6d. in London, and 36s. 9d. in Hull. Rape is also lower; English Brown is 38s., and last four months 39s. sellers. Rosin is dull. Turpentine is lower, last sales French made at 30s. 6d., and English 31s. 6d. A large business has been done in Petroleum, and the price closed firm at 1s. 4d. on the spot, and 1s. 5d. for the last four months; several cargoes have been sold afloat at 1s. 3¾d. to 1s. 4d. for the United Kingdom. Nothing done in Crude.

In the Drug Market business has continued on an ex- emely small scale, and where sales are pressed lower rices are taken. Castor Oil, of the better kinds, has given ay 1s. 4d. per lb., but Cassia is quiet at 11s. 9d. Only all sales have been made in Oil of Aniseed at 11s. 9d. to s. Lemongrass Oil is ¼d. to ½d. lower, and large sales. tronelle is also ¼d. cheaper. Cod Liver Oil is steady. ast Indian and Turkey Gum Arabic are steady, but only oderate sales. Cubebs are rather easier, last sales made 58s, and moulds at 56s. Sarsaparilla is rather better. lap moves off steadily at late rates. Ipecacuanha is eady at 9s. 3d. to 9s. 6d. Balsam Capivi is 1d. lower. mphor is rather better, sales made at £7. Turkey Opium rather easier, fine 17s. to 17s. 6d. Jamaica Bees Wax is 6d. to 5s. cheaper, but large sales. Barbadoes Aloes are her easier; Cape steady. Bark sells steadily at late es. Gamboge is rather dearer. Good China Rhubarb is dearer; a parcel just arrived sold, flat 6s. 6d. to 7s. 7d., l round 6s. 8d. to 6s. 9d. Turkey Galls quiet; Japan are er. Shellac is full up to 2s. 6d. dearer. Cochineal in s demand, and about 1d. cheaper. Safflower is rather rer. Gambier is better for the ordinary kinds, but bes are lower. Logwood is easier. Linia Wood is rather rer. Turmeric is quiet at the late decline. Cardamoms without change. In other goods there is no change to ort.

PRICE CURRENT.

hese quotations are the latest for ACTUAL SALES *in Mincing e. It will be necessary for our retail subscribers to bear in l that they cannot, as a rule, purchase at the prices quoted, much as these are the* CASH PRICES IN BULK. *They will, how- be able to form a tolerably correct idea of what they ought to pay.*

	1867.	1867.	1866.	1866.
	s. d.	s. d.	s. d.	s. d.
OL, Cape, per cwt.	65 0	77 6	70 0	85 0
ench	48 0	70 0	56 0	76 0
orto, red	29 0	30 0	32 0	40 0
ily	50 0	55 0	67 6	70 0
ples, white	60 0	70 0	66 0	71 0
rence, white	75 0	80 0	85 0	90 0
red	65 0	70 0	77 0	80 0
ogna, white	78 0	80 0	87 6	90 0
OWROOT..(duty 4½ per cwt.)				
uda..per lb.	1 0	1 6	1 0	1 5
Vincent	0 2½	0 4½	0 2¾	0 6
aica	0 2½	0 3½	0 3	0 4¼
er West India	0 0	0 0	0 2¼	0 3½
zil	0 0	0 0	0 2¼	0 3
t India	0 1½	0 3	0 2¼	0 4
al	0 3	0 7¾	0 3¼	0 8
ra Leone	0 4	0 4½	0 3¼	0 4
ES....per cwt.				
, Canada, 1st sort	32 6	0 0	32 0	32 6
rl, ditto, 1st sort	45 0	0 0	45 0	0 0
ISTONE,				
gh....per ton	132 6	0 0	130 0	0 0
	200 0	210 0	200 0	210 0
r	270 0	0 0	245 0	260 0
ICALS,				
—Acetic, per lb.	0 4	0 0	0 4	0 0
Citric	1 10	0 0	1 10	1 10½
Nitric	0 5	0 5½	0 5	0 5½
Oxalic	0 9	0 0	0 11	1 0
Sulphuric	0 0¾	0 1	0 0¾	0 1
Tartaric crystal	1 1½	1 1¾	1 4	0 0
powdered	1 2½	1 3	1 4½	0 0
n ....per ton	150 0	155 0	150 0	155 0
powder	170 0	0 0	160 0	0 0
nonia, Carbonate, per lb.	0 5	0 5¼	0 5	0 5¼
Sulphate ......per ton	240 0	250 0	220 0	245 0
mony, ore	0 0	220 0	180 0	190 0
crude ......per cwt	22 0	23 0	24 0	25 0
regulus	33 6	34 0	34 0	0 0
French star	34 0	35 0	34 6	0 0
nic, lump	16 0	16 6	0 0	15 6
powder	7 6	7 9	7 6	0 0
hing powder	14 0	14 6	17 0	17 6
k, East India refined ..	0 0	0 0	0 0	0 0
British	70 0	0 0	65 0	0 0
nel ......per lb.	2 5	0 0	2 5	0 0
hor, refined	1 10½	0 0	1 7½	0 0
ras, green ....per ton	55 0	60 0	56 0	60 0
sive Sublimate, per lb.	1 11	0 0	1 11	2 0
Emerald	0 0	0 0	0 0	0 0
runswick ....per cwt.	0 0	0 0	0	0 0

	1867.	1867.	1866.	1866.
CHEMICALS.	s. d.	s. d.	s. d.	s. d.
Iodine, dry ....per oz.	0 9	0 0	0 8¾	0 8½
Magnesia, Carbon....per cwt.	42 6	0 0	42 6	45 0
Calcined....per lb.	1 6	1 8	1 6	1 8
Minium, red ......per cwt.	21 6	22 6	22 0	22 6
orange	33 6	0 0	32 6	0 0
Potash, Bichromate..per lb.	0 5	0 0	0 5½	0 6
Chlorate	1 0	1 0½	1 1	1 1½
Hydriodate..per lb.	12 0	0 0	0 0	0 0
Prussiate....per lb.	1 0½	1 1	1 1	1 1½
red	1 9½	1 10	1 9½	1 10
Precipitate, red .... per lb.	2 5	2 6	0 0	2 6
white	0 0	2 5	2 5	0 0
Prussian Blue	1 0	1 10	1 0	1 10
Rose Pink ....per cwt.	29 0	0 0	29 0	0 0
Sal-Acetos ....per lb.	0 11½	0 0	1 1½	1 2
Sal-Ammoniac ....per cwt.				
British	33 3	36 0	35 6	38 0
Salts, Epsom	8 6	9 0	8 6	9 6
Glauber	5 6	0 0	5 0	6 0
Soda, Ash..........per deg.	0 2¼	0 2¾	0 2¼	0 2½
Bicarbonate..per cwt.	15 6	0 0	17 6	18 0
Crystals ......per ton	110 6	112 6	125 0	127 6
Sugar Lead, white per cwt.	37 6	38 0	38 0	39 0
brown	28 0	29 6	27 0	27 6
Sulphate Quinine....per oz.				
British, in bottle ..	4 9	0 0	5 0	0 0
Foreign	4 2	0 0	4 8	0 0
Sulphate Zinc......per cwt.	0 0	0 0	0 0	0 0
Verdigris............per lb.	0 11	1 0	0 11	1 0
Vermilion, English	2 9	3 2	2 9	3 0
China	2 6	2 7	0 0	3 9
Vitriol, blue or Rom. per ct.	25 0	26 6	25 0	27 0
COCHINEAL, per lb.				
Honduras, black	3 3	4 2	3 2	4 6
silver	2 8	3 10	2 0	3 7
Mexican, black	3 5	3 7	3 2	3 5
silver	3 3	3 4	3 1	3 2
Lima	0 0	0 0	0 0	0 0
Teneriffe, black	3 3	5 0	3 3	4 0
silver	3 2	3 7	3 2	3
DRUGS,				
Aloes, Hepatic ....per cwt.	80 0	180 0	100 0	180 0
Socotrine	180 0	290 0	140 0	290 0
Cape, good	30 0	33 0	36 0	39 0
inferior	17 0	30 0	20 0	35 0
Barbadoes	80 0	280 0	50 0	280 0
Ambergris, grey ....per oz.	35 0	40 0	26 0	30 0
Angelica Root ....per cwt.	0 0	0 0	20 0	35 0
Aniseed, China star	0 0	120 0	85 0	90 0
German, &c.	30 0	42 0	26 0	40 0
Balsam, Canada ....per lb.	1 4	1 5	1 10	2 0
Capivi	1 9	1 10	1 10	1 11
Peru	6 5	6 9	5 6	0 0
Tolu	2 2	2 3	2 6	0 0
Bark, Cascarilla....per cwt.	16 0	28 0	20 6	29 0
Peru, crown & grey per lb.	1 4	2 0	1 2	2 2
Calisaya, flat	2 6	2 9	2 6	2 9
quill	2 2	2 6	1 10	2 8
Carthagena	0 10	1 4	1 0	1 4
Pitayo	0 9	1 8	0 9	2 0
Red	2 6	12 0	2 6	13 0
Bay Berries........per cwt.	0 0	0 0	0 0	0 0
Bucca Leaves........per lb.	0 2½	0 9	0 4	0 11
Camomile Flowers	35 0	90 0	40 0	120 0
Camphor, China	137 6	140 0	125 0	127 6
Canella alba	22 0	33 0	40 0	45 0
Cantharides ....per lb.	2 4	2 5	2 5	0 0
Cardamoms, Malabar, good	5 6	6 9	5 8	6 6
inferior	3 9	5 3	3 6	5 6
Madras	3 9	5 9	2 9	5 8
Ceylon	2 6	2 9	3 0	3 9
Cassia Fistula......per cwt.	18 0	32 0	15 0	38 0
Castor Oil, 1st pale ..per lb.	0 6½	0 7¾	0 7¼	0 7½
2nd	0 6	0 6¼	0 6¾	0 7
inferior and dark	0 5¾	0 6	0 6½	0 6¾
Bombay, in casks	0 5½	0 0	0 5½	0 6½
Castorum	1 0	20 0	1 0	20 0
China Root ....per cwt.	28 0	30 0	20 0	40 0
Cocculus Indicus	33 0	35 0	30 0	40 0
Cod Liver Oil ......per gal.	3 6	5 6	3 6	5 9
Colocynth, apple ....per lb.	0 7	0 11	0 7½	1 2
Colombo Root ....per cwt.	30 0	58 0	160 0	200 0
Cream Tartar				
French	82 0	83 0	82 6	85 0
Venetian	0 0	0 0	87 6	0 0
grey	75 0	0 0	80 0	82 6
brown	70 0	72 6	82 6	0 0
Croton Seed	89 6	105 0	300 0	400 0
Cubebs	56 0	58 0	75 0	0 0
Cummin Seed	14 0	18 0	17 0	24 0
Dragon's blood reed	210 0	220 0	300 0	400 0
lump	85 0	280 0	105 0	280 0
Galangal Root	13 0	0 0	9 6	10 6
Gentian Root	16 0	0 0	16 0	18 0
Guinea Grains .... per cwt.	53 0	56 0	83 0	85 0
Honey, Narbonne	50 0	70 0	50 0	70 0
Cuba	26 0	41 0	26 0	35 0
Jamaica	23 0	55 0	30 0	55 0
Ipecacuanha ....per lb.	9 0	9 6	12 0	13 0
Isinglass, Brazil	2 0	3 10	2 2	5 4
East India	1 10	4 2	1 6	4 4
West India	3 8	3 11	3 9	4 2
Russian	9 6	10 6	7 6	11 0
Jalap	0 9	5 0	0 9	5 3

DRUGS—*continued.*	1867. s.	d.	1867. s.	d.	1866. s.	d.	1866. s.	d.
Juniper Berries ....per cwt.								
German and French	8	6	9	6	8	0	10	0
Italian	9	0	10	0	9	6	10	0
Lemon Juice ......per deg.	0	0¾	0	0⅞	0	0¾	0	0⅞
Liquorice ....per cwt.								
Spanish	65	0	0	0	75	0	80	0
Italian	50	0	60	0	55	0	75	0
Manna, flaky	3	9	4	3	4		5	0
small	1	10	2	0	1	10	2	0
Musk ....per oz.	15	0	32	0	18	0	30	0
Nux Vomica	12	6	14	6	11	0	18	0
Opium, Turkey	15	6	17	6	13	6	16	0
Egyptian	3	6	7	0	4	0	7	0
Orris Root ......per cwt.	30	0	45	0	38	0	48	0
Pink Root .... per lb.	0	10	0	11	3	9	4	0
Quassia (bitter wood) per ton	110	0	120	0	135	0	145	0
Rhatany Root ......per lb.	0	7	1	0	0	4	1	2
Rhubarb, China, round	2	6	9	6	2	6	12	6
flat	2	0	7	6	2	3	3	0
Dutch, trimmed	9	0	12	0	14	0	15	0
Russian	0	0	10	0	16	0	17	0
Saffron, Spanish	36	0	40	0	32	0	36	0
Salep.............. per cwt.	110	0	120	0	120	0	130	0
Sarsaparilla, Lima	1	0	1	4	1	0	1	4
Para	0	11	1	1	0	11	1	1
Honduras	0	10	1	5	0	10	1	6
Jamaica	1	0	2	1	1	1	2	3
Sassafras ....per cwt.	8	0	9	0	10	6	11	0
Scammony, virgin ..per lb.	30	0	40	0	30	0	44	0
second	12	0	23	0	13	6	23	0
Seneka Root	1	7	0	0	2	6	2	0
Senna, Calcutta	0	0	0	0	0	0	0	0
Bombay	0	2½	0	4½	0	4	0	5½
Tinnevelly	0	2	0	9	0	3½	0	0
Alexandria	0	5	0	10	0	3	0	9
Snake Root	2	6	0	0	0	0	0	0
Spermaceti, refined	1	6	0	0	0	0	1	2
Squills	0	2	0	2½	0	2½	0	4
Tamarinds, E. India, per cwt.	27	0	27	6	48	0	56	0
West India	16	0	28	0	16	0	33	0
Terra Japonica—								
Gambier ....per cwt.	17	0	25	0	22	6	31	0
Cutch	20	0	36	0	26	0	31	6
Valerian Root, English	20	0	29	0	20	0	29	0
Vanilla, Mexican......per lb.	4	0	16	0	6	0	16	0
Wormseed..........per cwt.	5	6	6	0	0	0	0	0
GUM—Ammoniac, drop, per cwt.	180	0	220	0	120	0	170	0
lump	100	0	165	0	40	0	85	0
Animi, fine pale	210	0	230	0	210	0	270	0
bold amber	100	0	200	0	100	0	220	0
medium	160	0	180	0	160	0	180	0
small and dark	100	0	150	0	100	0	150	0
ordinary dark	70	0	105	0	40	0	97	0
Arabic, E. I., fine pale picked	86	0	88	0	85	0	105	0
unsorted, good to fine	73	0	80	0	72	0	80	0
red and mixed	55	0	68	0	55	0	70	0
siftings	35	0	45	0	45	0	50	0
Turkey, picked, good to fine	190	0	220	0	170	0	225	0
second and inferior	85	0	160	0	95	0	160	0
in sorts	70	0	90	0	46	0	70	0
Gedda	62	0	65	0	61	0	65	0
Barbary, white	75	0	80	0	85	0	90	0
brown	80	0	0	0	80	0	85	0
Australian	60	0	68	0	50	0	56	0
Assafœtida, fair to good	36	0	90	0	30	0	80	0
Benjamin, 1st quality	360	0	700	0	300	0	400	0
2nd ,,	240	0	350	0	240	0	300	0
3rd ,,	50	0	240	0	50	0	240	0
Copal, Angola, red	70	0	80	0	80	0	90	0
pale	0	0	0	0	85	0	95	0
Benguela	62	6	75	0	67	6	90	0
Sierra Leone .. per lb.	0	4½	0	11½	0	4	0	11½
Manilla...... per cwt.	24	0	45	0	25	0	50	0
Dammar, pale ......per cwt.	65	6	79	0	52	6	60	0
Galbanum	240	0	280	0	200	0	210	0
Gamboge, picked, pipe	500	0	600	0	400	0	460	0
in sorts	340	0	400	0	280	0	400	0
Guaiacum............per lb,	0	9	2	6	0	0	2	0
Kino .... per cwt.	240	0	260	0	300	0	500	0
Kowrie	30	0	70	0	30	0	75	0
Mastic, picked ...... per lb.	5	0	6	0	13	0	0	0
Myrrh, gd. and fine, per cwt.	150	0	180	0	130	0	160	0
sorts	80	0	140	0	70	0	110	0
Olibanum, pale drop	73	0	78	0	69	0	75	0
amber and yellow	59	0	72	0	59	0	68	0
mixed and dark	24	0	46	0	20	0	48	0
Senegal	02	6	97	6	80	0	100	0
Sandrac	85	0	90	0	90	0	100	0
Tragacanth, leaf	220	0	320	0	200	0	280	0
in sorts	80	0	200	0	70	0	180	0
OILS..................per tun	£	s.	£	s.	£	s.	£	s.
Seal	35	0	41	0	43	0	0	0
Sperm, body	103	0	105	0	126	0	127	0
Cod	38	0	39	0	46	0	0	0
Whale, Greenland	0	0	0	0	0	0	0	0
South Sea, pale	39	0	40	0	42	0	44	0
East India Fish	35	0	0	0	35	0	0	0
Olive, Galipoli ...... per ton	63	0	64	0	56	0	0	0
	s.	d.	s.	d.	s.	d.	s.	d.
Florence, half-chest ..	0	0	0	0	0	0	0	0
Cocoanut, Cochin ..per cwt.	56	0	57	0	53	0	54	0
Ceylon	49	0	50	0	44	0	46	0
Sydney	43	0	48	0	40	0	43	6
Ground Nut an Gin								
Bombay	50	0	0	0	48	0	49	0

OILS—*continued.*	1867. s.	d.	1867. s.	d.	1866. s.	d.	1866. s.	d.
Madras ....per cwt.	50	0	55	0	50	0	51	0
Palm, fine	40	0	40	6	40	6	41	6
Linseed	38	6	0	0	39	0	39	3
Rapeseed, English, pale	40	6	41	0	43	0	0	6
brown	38	0	0	0	41	0	0	0
Foreign pale	42	0	0	0	45	0	45	6
brown	39	6	0	0	41	6	0	0
Lard	57	0	58	0	64	0	65	0
Tallow	36	0	38	0	36	0	0	0
Rock Crude .... per ton	£11	10	0	0	£15	0	£ 0	0
OILS, Essential—								
Almond, essential . .per lb.	35	0	0	0	40	0	0	0
expressed	1	10	0	0	2	0	0	0
Aniseed	11	9	12	0	8	9	9	0
Bay ....per cwt.	80	0	90	0	90	0	0	0
Bergamot ....per lb.	11	3	19	0	9	6	13	0
Cajeputa, (in bond) ..per oz.	0	2	0	2½	0	2¾	0	3
Caraway ....per lb.	5	0	6	6	5	0	6	6
Cassia	6	6	6	9	7	6	7	9
Cinnamon (in bond) ..per oz.	1	3	3	5	1	6	3	9
Cinnamon Leaf	0	4	0	6	0	4	0	6
Citronel	0	2¾	0	4	0	3½	0	5
Clove	2	7	0	0	2	8	0	0
Croton	1	2	1	6	1	2	1	6
Juniper...........per lb.	1	6	1	9	1	9	2	0
Lavender	2	9	3	9	2	0	3	3
Lemon	5	0	8	0	4	6	7	0
Lemongrass..........per oz.	0	5	0	8	1	4	1	5
Mace, ex.	0	6	0	7	0	2	0	
Neroli	3	6	4	6	3	6	4	
Nutmeg	0	6	0	7	0	3	0	
Orange ....per lb.	5	0	7	6	5	0	7	
Otto of Roses ....per oz.	17	0	21	0	17	6	20	
Peppermint, per lb.								
American	22	6	23	0	15	6	16	
English	38	0	44	0	30	0	33	
Rhodium ....per oz.	0	0	0	0	0	0	6	
Rosemary ....per lb.	1	9	2	0	1	9	2	
Sassafras	3	0	3	6	3	3	4	
Spearmint	16	0	25	0	25	0	0	
Spike	0	0	0	0	0	0	0	
Thyme	2	0	4	0	1	8	2	
PITCH, British ......per cwt.	8	6	0	0	8	6	0	
Swedish	0	0	0	0	0	0	0	
SALTPETRE, per cwt.								
English, 6 per cent. or under	18	0	18	6	20	0	20	
over 6 per cent.	17	6	17	9	19	0	19	
Madras	15	0	16	0	18	0	20	
Bombay	14	0	17	0	15	0	20	
British-refined	22	0	22	6	25	0	26	
Nitrate of soda	11	6	12	6	12	0	12	
SEED, Canary ....per qr.	0	0	0	0	40	0	48	
Caraway, English .. per cwt.	0	0	0	0	0	0	0	
German, &c.	40	0	44	0	0	0	0	
Coriander	18	0	20	0	0	0	0	
East India	0	0	0	0	0	0	0	
Hemp	38	0	42	0	44	0	46	
Linseed, Black Sea	63	0	64	0	61	0	62	
Calcutta	67	0	68	0	66	0	67	
Bombay	69	0	0	0	68	6	70	
Egyptian	0	0	0	0	0	0	0	
Mustard, brown....per bshl.	0	0	0	0	0	0	0	
white	9	0	12	0	0	0	0	
Poppy, East India....per qr.	62	0	0	0	52	0	0	
Rape, English	0	0	0	0	0	0	0	
Danube	58	0	59	0	0	0	0	
Calcutta fine	53	0	53	6	52	0	52	
Bombay	55	0	63	0	59	0	60	
Teel, Sosmy or Gugy	63	0	65	0	64	0	67	
Cotton ....per ton	180	0	190	0	150	0	0	
Ground Nut Kernels per ton	360	0	0	0	340	0	0	
SOAP, London yel. .. per cwt.	28	0	32	0	28	0	32	
mottled	32	0	36	0	32	0	36	
curd	46	0	50	0	46	0	50	
Castile	40	0	42	0	40	0	42	
Marseilles	40	0	42	0	40	0	42	
Soy, China ....per gal.	2	9	3	0	3	0	0	
Japan	0	0	0	0	0	0	0	
Sponge, Turkey, fine picked	12	0	14	0	14	0	18	
fair to good	5	0	11	0	6	0	12	
ordinary ..	2	0	4	0	1	6	4	
Bahama ..	0	8	1	9	0	8	[illegible]	
TURPENTINE, Rough, per ct.	0	0	0	0	10	0	0	
Spirits, French	30	6	0	0	41	6	0	
American, in casks	31	6	0	0	41	0		
WAX, Bees, English	180	0	190	0	180	0	18	
German	180	0	190	0	195	0	2	
American	150	0	170	0	185	0	190	
white fine	0	0	0	0	0	0	0	
Jamaica	155	0	165	0	160	0	180	
Gambia	175	0	185	0	175	0	190	
Mogadore	130	0	160	0	140	0	16	
East India	160	0	190	0	160	0	190	
ditto, bleached	165	0	205	0	190	0	21	
vegetable, Japan	54	0	95	0	54	0	8	
WOOD, DYE, per ton								
Fustic, Cuba	150	0	175	0	150	0	17	
Jamaica	140	0	150	0	100	0	105	
Savanilla	120	0	130	0	120	0	1	
Zante	0	0	0	0	0	0		
Logwood, Campeachy	165	0	170	0	165	0	1	
Honduras ..	100	0	105	0	100	0	1	
St. Domingo	82	0	85	0	90	0	[illegible]	
Jamaica ...	79	0	77	6	85	0	[illegible]	